

Henry Ford College

2025-2026 Catalog

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Degree Types

HFC offers many pathways to earning college credit. You may choose to obtain an Associate Degree with the intention of transferring to a four-year university or earn an Associate Degree or Certificate of Achievement in a career-related field. Whatever path you choose, we highly recommend working with a HFC Academic Advisor to develop an educational plan to meet your specific goals.

Programs of Study

Transfer Programs

Programs of study designed for transfer to a four-year college or university:

- Associate in Arts (AA) – intended for students who plan to pursue a non-Science, Technology, Engineering, and Mathematics (STEM) Bachelor Degree.
- Associate in Applied Arts (AAA) - intended for students who wish to pursue the visual or performing arts.
- Associate in Fine Arts (AFA) - intended for students who wish to study the fundamentals of art and concentrate on their specific medium of interest.
- Associate in Science (AS) – intended for students who plan to pursue a STEM Bachelor Degree.
- Associate in General Studies (AGS) – intended for student who are undecided but wish to earn college credits while exploring career options. HFC strongly recommends working with a HFC Counselor to develop and educational plan.

Career Programs

Programs of study designed to prepare you for entry into a specific career field or to upgrade skills if you are already employed. Our career programs also transfer to four-year colleges and universities if you plan to pursue a Bachelor's Degree.

- Bachelor of Science (BS) – if you plan to pursue a Culinary Arts Bachelor's Degree.
- Associate in Applied Arts (AAA), Associate in Applied Science (AAS), and Associate in Business (AB) – if you plan to pursue an occupational-focused two-year degree.
- Certificates of Achievement – if you plan to pursue an occupational-focused program that has fewer required credits. Many programs of study are designed so that the credits you earn during the achievement of certificates may be applied to an Associate Degree.

General Requirements for Degree Types

Bachelor's Degree

A bachelor's degree will be awarded after you have completed an approved program, as long as you have fulfilled the following conditions:

1. Earn a minimum of 120 semester hours of credit with a 2.00 cumulative GPA or higher.
2. Complete General Education and Degree Specific Graduation Requirements.
3. Complete all required and elective courses for the Program of Study. Go to Self-service and select Program Evaluation to find this information.
4. Developmental courses do NOT meet General Education, Degree Specific Requirements, or Program Requirements nor count toward the minimum requirement of 120 semester hours.
5. Complete a minimum of 30 semester hours of credit at HFC.
6. Transferability of courses maybe restricted based upon program specific policies and requirements.
7. A student holding a Bachelor's Degree from a regionally accredited college or university will be given transfer credit equivalencies that meet the General Education Requirements for graduation.
8. All financial obligations to HFC have been met.

Associate Degree

An associate degree will be awarded after you have completed an approved program, as long as the following conditions have been fulfilled:

1. Earn a minimum of 60 semester hours of credit with a 2. 00 cumulative grade point average (GPA) or higher.
2. Complete General Education and Degree Specific Graduation Requirements.
3. Complete all required and elective courses for the Program of Study. Go to Self-service and select Program Evaluation to find this information.
4. Developmental courses do NOT meet General Education, Degree Specific Requirements, or Program Requirements nor count toward the minimum requirement of 60 semester hours.
5. Complete a minimum of 20 semester hours of credit at HFC. The balance of credit may be transferred in from other sources (usually accredited colleges). Students must work with the HFC University Transfer, Academic Advising, and Career Counseling Office and/or the Admissions, Registration, and Records Office to establish an official record of transfer credit at the College.
6. A student holding a Bachelor's Degree from a regionally accredited college or university will be given transfer credit equivalencies that meet the General Education Requirements for graduation.
7. All financial obligations to the College have been met.

Degree Requirements

In addition to Required Core and Required Support Courses, all students working toward the completion of an associate or bachelor degree must satisfy Degree Specific Requirements AND General Education Requirements. The following summary lists graduation requirements for all HFC degrees.

DEGREE TYPE	MINIMUM NUMBER OF GENERAL EDUCATION CREDITS	COMPUTER TECHNOLOGY DEGREE REQUIREMENT CREDITS	SCIENCE AND MATH DEGREE REQUIREMENT CREDITS	REQUIRED CORE AND SUPPORT COURSES	MINIMUM NUMBER OF CREDITS THAT MUST BE TAKEN AT HFC	MINIMUM NUMBER OF CREDITS REQUIRED FOR GRADUATION
Associate in Arts (AA)	30	3	N/A	Varies by Program of Study	20	60
Associate in Applied Arts (AAA)	15	3	N/A	Varies by Program of Study	20	60
Associate in Business (AB)	15	3	N/A	Varies by Program of Study	20	60
Associate in Fine Arts (AFA)	30	3	N/A	Varies by Program of Study	20	60
Associate in General Studies (AGS)	15	3	N/A	Varies by Program of Study	20	60
Associate in Science (AS)	30	3	24	Varies by Program of Study	20	60
Associate in Applied Science (AAS)	15	3	N/A	Varies by Program of Study	20	60
Bachelor of Science (BS)	30	N/A	N/A	Varies by Program of Study	30	120

HFC's Philosophy on General Education (and why you should care)

General Education is defined as a culmination of learning experiences that enable students to attain the knowledge and skills needed by every college graduate. General Education establishes a foundation of skills and understandings to enable success in employment and further education. In line with its belief that General Education competence should be defined by the College to meet the needs of the external communities in which its graduates must function, HFC has collected and restated expectations identified by employers, alumni, and four-year universities. HFC's Institutional Outcomes reflect those expectations, and we require our students to successfully complete courses that will lead towards competence in these areas. Hence, all students are required to successfully complete a minimum of 30 General Education credits for all Bachelor of Science, Associate in Arts, Associate in General Studies, and Associate in Science degrees, or a minimum of 15 General Education credits for all Associate in Applied Science and Associate in Business degrees.

How do Students Benefit from General Education?

General Education empowers you to develop independent, critical and creative thinking skills while fostering an appreciation of the diversity, inclusion, understanding, and acceptance that you will need for success in a global society. HFC's General Education Courses are designed to produce graduates that are proficient in the following Institutional Outcomes that will equip you for your career and life:

- **Civil Society and Culture—U.S. and Global:** You will compare and contrast the United States with other nations or world regions, addressing social (economic, political and cultural) issues, patterns of diversity or aspects of inequality.
- **Communication:** You will effectively communicate ideas appropriate to your discipline using standard English, through written and verbal communication.
- **Computer Technology:** You will demonstrate skills for computer technology, including Internet, network and advanced file operations. Skills will include organizing, managing, and presenting data using general productivity software. You will also identify security and integrity threats and identify unethical actions within their social or professional environments.
- **Critical Thinking and Information Literacy:** You will demonstrate the ability to analyze and evaluate information and identify the need for research to draw conclusions, formulate inferences, solve problems, and make decisions. You will also demonstrate information literacy skills by locating, evaluating, selecting, organizing, synthesizing, and ethically documenting information from multiple sources using both informal and formal formats, as appropriate for diverse writing situations.
- **Quantitative Literacy:** You will apply quantitative skills to analyze situations and make decisions in a variety of contexts.

HFC has designed our Associate in Arts, Science, and General Studies degrees to allow you the opportunity to satisfy the Michigan Transfer Agreement (MTA) while completing your degree, with no duplication of credits. Most Programs of Study incorporate General Education Requirements in the Required Core or Required Support courses. We strongly urge you to work with your advisor to craft an educational plan.

Degree Specific Requirements

The following are Degree Specific Graduation Requirements for Henry Ford College degrees; not all categories are required for every degree. Many programs have required courses that fulfill these categories. However, some programs give students the choice to select courses from the below categories. Students should check their program of study prior to selecting any classes and are encouraged to work with a HFC Advisor or Counselor to craft an educational plan.

Computer Technology Degree Requirements

HFC requires **all students pursuing an Associates degree** to complete at least one course that fulfills the Computer Technology Institutional outcome. The courses, given below, are designed to produce graduates that meet the following outcome:

Students will demonstrate skills for computer technology, including Internet, network and advanced file operations. Skills will include organizing, managing, and presenting data using office productivity software. Students will also identify security and integrity threats and identify unethical actions within their social or professional environments.

Many programs have required courses that fulfill the computer technology requirement. However, some programs give students the choice to select their preference. Students should check their program of study prior to selecting any classes and are encouraged to work with HFC's Academic Advisors or Counselors to create an educational plan.

Courses that fulfill the Computer Technology Degree Requirement:

Art: ART111 Digital Media, ART275 Advanced Projects

Computer Information Systems: CIS100 Intro Info Tech, CIS221 Instruction Tech for Educators

Engineering: ENGR125 Intro Computation for Engineer

Health Careers: HCS131 Computers in Health Care

Music: MUS156 Music Technology

Trade and Apprentice Education: TAFD117 Industrial Computer Applicatio

Note: These classes may not apply to the Michigan Transfer Agreement (MTA)

Wellness Degree Requirements

In addition to General Education, some degree programs require students to complete at least one wellness course. The courses, given below, are designed to produce graduates that meet the following outcome:

Students will demonstrate the knowledge and skills necessary to establish a positive pattern of life-long wellness choices.

Many programs have required courses that fulfill the wellness requirement. However, some programs give students the choice to select their preference. Students should check their program of study prior to selecting any classes and are encouraged to work with HFC's Academic Advisors or Counselors to create an educational plan.

Courses that fulfill the Wellness Degree Requirement:

Business Finance: BFN130 Beginning Investment, BFN141 Personal Finance

Counseling: COUN110 Human Potential Seminar, COUN114 Stress Mgmnt-Personal Approach, COUN119 Issues in Personal Growth, COUN125 Life Work Planning, COUN128 Active Parenting

Health and Fitness: HPE141 Intro to Health and Wellness, HPE151 Methods for Teaching Exercise, HPE158 Introduction to Nutrition, HPE170 Principles Personal Training, HPE192 - Missing course, HPE253 Nutrition for the Professional

Health and Fitness Activities: HPEA110 Volleyball I, HPEA117 Strength Train & Phys Cond I, HPEA122 Yoga-Based Fitness, HPEA155 Relax Tech for Stress Mgmt, HPEA210 Volleyball II, HPEA217 Strength Train & Phys Cond II

Note: These classes may not apply to General Education Requirements within the *Michigan Transfer Agreement (MTA).*

General Education Requirements

Your goals will determine this choice. Please talk to your HFC Advisor to make sure your program will lead you to your goals.

Generally:

- If you want to transfer to a 4-year university to earn a bachelor's degree, you should choose MTA.
- If you want to earn your Associate Degree and go into the workforce, you should choose Applied Degrees.

The following pages outline our general education requirements for transfer (MTA) degrees and Applied (Career) degrees.

General Education Requirements for Transfer Degrees

The following are Michigan Transfer Agreement categories for Henry Ford College transfer degrees:

- AA - Associate in Arts
- AB - Associate in Business
- AFA - Associate in Fine Arts
- AS - Associate in Science

Programs that include 2+2 or 3+1 agreements with 4-year universities require thirty (30) credit hours of general education coursework to fulfill requirements of the Michigan Transfer Agreement.

Many programs have required courses that fulfill these categories. However, some programs give students the choice to select courses from the below categories. Check your program of study prior to selecting any classes and work with your HFC Advisor to craft an educational plan to fit your specific needs.

Category One: 1 course in English Composition

Develop broadly useful college-level skills in writing clearly, reading thoughtfully, thinking critically, and using information ethically.

Choose 1 course from the following:

ENG131 Introduction College Writing, ENG131A Intro College Writing (ALP), ENG131E Intro College Writing ALP-ELL, ENG131H Honors Intro College Writing, ENG132 College Writing and Research, ENG132H Honors Coll Writing & Research, ENG135 Bus & Tech Writing & Research

Note: Courses cannot be double counted in Category Two

Category Two: 1 course in English Composition or Communications

Enhance your skills in writing, reading, speaking, thinking, and using information; apply those skills in a variety of college, workplace, and interpersonal communications.

Choose 1 course from the following:

Communications: SPC131 Introduction Public Speaking, SPC145 Interpersonal Communication

English Composition: ENG131 Introduction College Writing, ENG131A Intro College Writing (ALP), ENG131E Intro College Writing ALP-ELL, ENG131H Honors Intro College Writing, ENG132 College Writing and Research, ENG132H Honors Coll Writing & Research, ENG135 Bus & Tech Writing & Research

Note: Courses cannot be double counted in Category One.

Category Three: 1 course in Mathematics

Expand your ability to solve problems, interpret data, and think analytically across academic, personal, and professional settings.

Please note that one course is chosen from the following Mathematics list and groupings, including the College Algebra, Quantitative Literacy, and Statistics Tracks. One course from any of these areas will fulfill HFC's General Education Requirements.

Choose 1 course from the following:

College Algebra Track: MATH115 College Algebra, MATH165 Mathematics for Calculus, MATH175 Precalculus, MATH180 Calculus 1, MATH183 Calculus II, MATH275 Discrete Mathematics, MATH280 Calculus III, MATH283 Linear Algebra, MATH288 Differential Equations

Quantitative Literacy Track: MATH122 Math for Elem Teachers I, MATH131 Math for the Modern World, MATH222 Math for Elem Teachers II

Statistics Track: MATH141 Introduction to Statistics

Category Four: 2 courses in Social Sciences

Explore the relationships between people, and between people and the world: its places, societies, beliefs and systems.

Choose 2 courses on Social Sciences from 2 different disciplines (subjects):

Anthropology: ANTH131 Intro Anthropology, ANTH151 Cultures of North America, ANTH152 Mid East People and Cultures, ANTH153 Introduction to Archaeology, ANTH154 Food, Culture, and Economy

Business Economics: BEC151 Prin Macro Economics, BEC152 Prin Micro Economics

Criminal Justice: CRJ126 Intro to Homeland Security, CRJ131 Intro Law Enf & Crim Just, CRJ132 Police Admin/Staff, CRJ134 Criminal Investigation, CRJ135 Juvenile Justice, CRJ136 Introduction to Corrections, CRJ138 Probation and Parole, CRJ140 Identity Theft:prevent & Aware, CRJ234 Criminalistics, CRJ251 Criminal Law, CRJ252 Criminal Procedure, CRJ285 Topics Criminal Justice

Education: EDU256 Educational Psychology, EDU260 History in Elementary Schools, EDU296 Exceptional Child

Geography: GEOG131 Environmental Geography, GEOG132 World Regional Geography, GEOG138 Geography of Michigan, GEOG221 Geography of the Middle East

History: HIST111 Ancient World History, HIST112 Medieval-Early Modern World, HIST113 Modern Wrld History, HIST151 Early American History, HIST152 Modern American History, HIST254 History of Michigan, HIST258 The Revolutionary War Era, HIST261 The Modern Middle East, HIST270 The American Civil War, HIST285 The U S & Second World War, HIST286 The U S & the Vietnam War

Political Science: POLS101 Am Gov:Democrat Participation, POLS131 Intro Amer Gov't & Pol Sci, POLS135 Amer Legal System & Process, POLS150 Leadership, Organizing & Publi, POLS152 International Relations, POLS155 State&local Govern, POLS200 Intro to Peace and Conflict, POLS201 Public Policy: Topics & Analys, POLS202 Foreign Policy: Topics & Analy

Psychology: PSY131 Introductory Psychology, PSY152 Child Psychology, PSY251 Abnormal Psychology, PSY253 Lifespan Development, PSY254 Social Psychology, PSY257 Health Psychology

Sociology: SOC131 Introduction to Sociology, SOC132 Marriage & Family, SOC151 Contemporary Social Problems, SOC152 Women, Men, & Society, SOC212 Ldrshp Diverse Comm & Organiza, SOC251 Ethnic & Racial Diversity, SOC253 Sociology of Deviance, SOC254 Social Psychology

World Religions: WR130 Intro to the Study of Religion

Category Five: 2 courses in Humanities and Fine Arts

Learn how people have communicated important ideas in ways connected deeply to culture and time as well as in ways that transcend place and time.

Choose 2 courses in Humanities and Fine Arts from 2 different disciplines (subjects), excluding studio and performance courses:

Arabic: ARA131 Elementary Arabic I, ARA132 Elementary Arabic II, ARA231 Intermediate Arabic I, ARA232 Intermediate Arabic II

Art: ART107 Photoshop, ART121 Art History Survey I, ART122 Art History Survey II, ART123 History of Modern Art, ART130 History of Graphic Desgn, ART135 Art Appreciation, ART221 Medieval Art, ART224 Art of Islam, ART225 Asian Art: India & SE Asia, ART226 African and Afro American Art, ART227 History of Arab Art & Architec, ART229 Survey of Contemporary Art

ASL (American Sign Language): ASL131 Elementary ASL I, ASL132 Elementary ASL II, ASL135 Fingerspelling and Numbering, ASL140 Fingerspelling and Numbering, ASL231 Intermediate ASL I, ASL232 Intermediate ASL II

Education: EDU250 Humanities/Perform Art Educat

English: ENG139 Creative Writing, ENG231 Intro to Literature, ENG232 Intro to the Short Story, ENG233 Intro to Novel, ENG234 Topics in Literature, ENG235 Amer Literature Before 1900, ENG236 American Autobiography, ENG237 American Literature Since 1900, ENG241 Shakespeare, ENG243 Women's Literature, ENG245 The Bible as Literature, ENG246 Intro to Children's Literature, ENG248 African American Literature

French: FRE131 Elementary French I, FRE132 Elementary French II, FRE231 Second-Year French III, FRE232 Second-Year French IV

German: GER131 Elementary German I, GER132 Elementary German II, GER231 Second-Year German III, GER232 Second-Year German IV

History: HIST111 Ancient World History, HIST112 Medieval-Early Modern World, HIST113 Modern Wrld History, HIST151 Early American History, HIST152 Modern American History, HIST254 History of Michigan, HIST258 The Revolutionary War Era, HIST261 The Modern Middle East, HIST270 The American Civil War, HIST285 The U S & Second World War, HIST286 The U S & the Vietnam War

Honors: HON151 HonorColloquiumCultureDetroit, HON161 Honors Colloquium, HON251 Great Works

Humanities: HUM101 Introduction to the Humanities, HUM105 World Civilization I, HUM204 Intro to American Cultural Stu, HUM251H Great Works

Interior Design: BLDI120 Principles of Design, BLDI130 Design & User Needs, BLDI140 Interior Design Mat & Comp, BLDI150 Light & Environ Sys for Interi, INTR181 Principles of Design

Italian: ITAL131 Elementary Italian I, ITAL132 Elementary Italian II

Journalism: JOUR131 News Writing

Media Communication Arts: MCA131 Intro to Media Communication, MCA132 Film History and Criticism, MCA241 Media Writing, TCM131 Introduction to Telecommunicat, TCM132 Film History and Criticism, TCM241 Media Writing

Music: MUS130 Music Appreciation, MUS132 Music Literature, MUS133 Exploring Popular Music, MUS134 Music Fundamentals, MUS138 Music Theory 1, MUS139 Music Theory 2, MUS141 Aural Music Skills 1, MUS142 Aural Music Skills 2, MUS154 Arab Music Appreciation, MUS232 History of Western Music 1, MUS233 History of Western Music 2, MUS238 Music Theory 3

Philosophy: PHIL130 Introduction to Philosophy, PHIL131 Introduction to Logic, PHIL133 Hist of Phil to 18th Century, PHIL135 History of Modern Philosophy, PHIL137 Topics in Philosophy, PHIL138 Moral Issues in Biotechnology, PHIL139 Ethics, PHIL201 Eastern Philosophy

Speech: SPC131 Introduction Public Speaking

Spanish: SPN131 Elementary Spanish I, SPN132 Elementary Spanish II, SPN231 Intermediate Spanish I, SPN232 Intermediate Spanish II

Theatre: THEA131 Theatre Appreciation, THEA135 Intro to Stage Makeup, THEA138 Stage Costuming, THEA238 Theatre History

World Religions: WR130 Intro to the Study of Religion, WR131 Relig Traditions in the World, WR232 Judaism,christianity,and Islam, WR233 Eastern Religions, WR235 Christianity - First 1000 Year, WR236 African American Religious Ex, WR240 Myths & Symbols:Deciphering, WR241 Islam, WR280 Topics in Religious Studies

Category Six: 2 courses in Natural Sciences

Gain theoretical and practical knowledge of the natural world and its processes by experimenting, evaluating evidence, and applying scientific principles.

Complete 2 courses in Natural Sciences, including one with laboratory experience, from 2 different disciplines (subjects). See additional notes below for exceptions.

Choose 2 courses from the following:

Lecture and Lab:

Biology: BIO131 Introduction to Biology, BIO134 Essentials Anatomy&Physiology, BIO135 Microbiology for AHS, BIO143 Zoology, BIO150 Bio: Organisms, Genes, Ecology, BIO152 Cell and Molecular Biology, BIO233 Anatomy and Physiology I, BIO234 Anatomy and Physiology II, BIO251 Microbiology

Chemistry: CHEM111 Chem Skills Pre-Professional, CHEM131 Principles of Chemistry, CHEM132 Prin Organ & Bio Chem, CHEM141 Prin Gen & Inorgan Chem I, CHEM142 Prin Gen & Inorgan Chem II

Geology: GEOL131 Physical Geology

Physics: PHYS131 General Physics I, PHYS132 General Physics II, PHYS133 Principles of Physics, PHYS231 Engineering Physics I, PHYS232 Engineering Physics II

Physical Science: PSCI131 Intro to Physical Science, PSCI135 Sound & Light in Fine-Arts

Science Education: SCI210 Intro to Science for Elem Educ, SCI212 Earth Science for Educators, SCI213 Lrning by Inquiry: Life Sci

Lecture Only:

Astronomy: ASTR131 Descriptive Astronomy

Biology: BIO130 Evolution and Behavior, BIO138 Environmental Science Lecture

Chemistry: CHEM241 Organic Chemistry I, CHEM242 Organic Chemistry II, CHEM243 Microscale Organic Chem Lab I, CHEM244 MicroscaleOrganic Chem Lab II

Engineering Technology: ENGR130 Intro to Engineering, ENGR201 Science of Materials, ENGR232 Statics

Meteorological Science: ATMS131 Weather and Climate

Lab Only:

Astronomy: ASTR133 Introductory Astronomy Lab

Biology: BIO139 Environmental Science Lab

Notes:

- ASTR131 Descriptive Astronomy is only eligible as an MTA natural science laboratory course if both ASTR131 Descriptive Astronomy and ASTR133 Introductory Astronomy Lab are completed.
- BIO138 Environmental Science Lecture is only eligible as an MTA natural science laboratory course if both BIO138 Environmental Science Lecture and BIO139 Environmental Science Lab are completed.

Category Seven: General Education

Some programs require additional general education credits, such as *"Complete additional courses from the Michigan Transfer Agreement (MTA) list, if needed, to reach 30 total credits."* These courses are representative from course options listed in category 1 through category 6.

Students should work with an Academic Advisor before selecting additional general education or MTA courses.

Computer Technology

Students will demonstrate skills for computer technology, including Internet, network and advanced file operations. Skills will include organizing, managing, and presenting data using office productivity software. Students will also identify security and integrity threats and identify unethical actions within their social or professional environments.

HFC courses that fulfill this requirement:

Computer Art: ART111 Digital Media, ART275 Advanced Projects

Computer Information Systems: CIS100 Intro Info Tech, CIS221 Instruction Tech for Educators

Engineering: ENGR125 Intro Computation for Engineer

Health Careers: HCS131 Computers in Health Care

Music: MUS156 Music Technology

Trade and Apprentice Education: TAED117 Industrial Computer Applicatio

General Education Requirements for Applied Degrees

The following are General Education categories for Henry Ford College Applied Degrees:

- AAA - Associate in Applied Arts
- AAS - Associate in Applied Sciences
- AB - Associate in Business

Some programs that include 2+2 or 3+1 agreements with 4-year universities require thirty (30) credit hours of general education coursework to fulfill requirements of the Michigan Transfer Agreement.

Many programs have required courses that fulfill these categories. However, some programs give students the choice to select courses from the below categories. Check your program of study prior to selecting any classes and work with your HFC Advisor to craft an educational plan to fit your specific needs.

Category One: 1 course in English Composition

Develop broadly useful college-level skills in writing clearly, reading thoughtfully, thinking critically, and using information ethically.

Choose 1 course from the following:

ENG131 Introduction College Writing, ENG131A Intro College Writing (ALP), ENG131E Intro College Writing ALP-ELL, ENG131H Honors Intro College Writing, ENG132 College Writing and Research, ENG132H Honors Coll Writing & Research, ENG135 Bus & Tech Writing & Research

Note: Courses cannot be double counted in Category Two.

Category Two: 1 course in English Composition or Communications

Enhance your skills in writing, reading, speaking, thinking, and using information; apply those skills in a variety of college, workplace, and interpersonal communications.

Choose 1 course from the following:

Communications: CIS294 Software Engineering, SPC131 Introduction Public Speaking, SPC145 Interpersonal Communication

English Composition: ENG131 Introduction College Writing, ENG131A Intro College Writing (ALP), ENG131E Intro College Writing ALP-ELL, ENG131H Honors Intro College Writing, ENG132 College Writing and Research, ENG132H Honors Coll Writing & Research, ENG135 Bus & Tech Writing & Research

Note: Courses cannot be double counted in Category One.

Category Three: 1 course in Mathematics

Expand your ability to solve problems, interpret data, and think analytically across academic, personal, and professional settings.

Choose 1 course from the following:

Automotive Technology: AUTO135 Mathematics for the Technician

Business: BMA110 Business Math

Computer Information Systems: CIS119 Math for Computer Professional

Engineering Technology: ENGR232 Statics

Mathematics: MATH100 Basic Tech Mathematics, MATH101 Math for Health Career, MATH103 Technical Mathematics, MATH104 Math for Food Service Careers, MATH110 Intermediate Algebra, MATH112 Trigonometry, MATH115 College Algebra, MATH122 Math for Elem Teachers I, MATH131 Math for the Modern World, MATH141 Introduction to Statistics, MATH165 Mathematics for Calculus, MATH175 Precalculus, MATH180 Calculus 1, MATH183 Calculus II, MATH222 Math for Elem Teachers II, MATH275 Discrete Mathematics, MATH280 Calculus III, MATH283 Linear Algebra, MATH288 Differential Equations

Trade and Apprentice Education: TAMA120 Indust Appl of Algebraic Princ

Category Four: 2 courses in Social Sciences

Explore the relationships between people, and between people and the world: its places, societies, beliefs and systems.

Choose 2 courses on Social Sciences from 2 different disciplines (subjects):

Anthropology: ANTH131 Intro Anthropology, ANTH151 Cultures of North America, ANTH152 Mid East People and Cultures, ANTH153 Introduction to Archaeology, ANTH154 Food, Culture, and Economy

ASL (American Sign Language): ASL130 Deaf Culture & the Deaf Comm

Criminal Justice: CRJ126 Intro to Homeland Security, CRJ131 Intro Law Enf & Crim Just, CRJ132 Police Admin/Staff, CRJ134 Criminal Investigation, CRJ135 Juvenile Justice, CRJ136 Introduction to Corrections, CRJ138 Probation and Parole, CRJ140 Identity Theft:prevent & Aware, CRJ234 Criminalistics, CRJ251 Criminal Law, CRJ252 Criminal Procedure, CRJ285 Topics Criminal Justice

Economics: BEC151 Prin Macro Economics, BEC152 Prin Micro Economics

Education: EDU256 Educational Psychology, EDU260 History in Elementary Schools, EDU296 Exceptional Child

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Sociology: SOC131 Introduction to Sociology, SOC132 Marriage & Family, SOC151 Contemporary Social Problems, SOC152 Women, Men, & Society, SOC212 Ldrshp Diverse Comm & Organiza, SOC251 Ethnic & Racial Diversity, SOC253 Sociology of Deviance, SOC254 Social Psychology

Spanish: SPN130 Intro to Hispanic Cultures

World Religions: WR130 Intro to the Study of Religion

Category Five: 2 courses in Humanities and Fine Arts

Learn how people have communicated important ideas in ways connected deeply to culture and time as well as in ways that transcend place and time.

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Spanish: SPN131 Elementary Spanish I, SPN132 Elementary Spanish II, SPN141 Elementary Spanish Conversatio, SPN231 Intermediate Spanish I, SPN232 Intermediate Spanish II, SPN290 Study Abroad Spanish Lang Cult

Theatre: THEA131 Theatre Appreciation, THEA135 Intro to Stage Makeup, THEA138 Stage Costuming, THEA238 Theatre History

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Chemistry: CHEM111 Chem Skills Pre-Professional, CHEM131 Principles of Chemistry, CHEM132 Prin Organ & Bio Chem, CHEM141 Prin Gen & Inorgan Chem I, CHEM142 Prin Gen & Inorgan Chem II, CHEM241 Organic Chemistry I, CHEM242 Organic Chemistry II, CHEM243 Microscale Organic Chem Lab I, CHEM244 MicroscaleOrganic Chem Lab II

Environmental Science: BIO138 Environmental Science Lecture, BIO139 Environmental Science Lab

Engineering Technology: ENGR130 Intro to Engineering, ENGR201 Science of Materials, ENGR232 Statics

Geology: GEOL131 Physical Geology

Meteorological Science: ATMS131 Weather and Climate

Physics: PHYS131 General Physics I, PHYS132 General Physics II, PHYS133 Principles of Physics, PHYS231 Engineering Physics I, PHYS232 Engineering Physics II

Physical Science: PSCI131 Intro to Physical Science, PSCI135 Sound & Light in Fine-Arts

Science Education: SCI210 Intro to Science for Elem Educ, SCI212 Earth Science for Educators, SCI213 Lrning by Inquiry: Life Sci

Trade and Apprentice Education: TAFD130 Indust App of Phys Science

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HFC courses that fulfill this requirement:

Computer Art: ART111 Digital Media, ART275 Advanced Projects

Computer Information Systems: CIS100 Intro Info Tech, CIS221 Instruction Tech for Educators

Engineering: ENGR125 Intro Computation for Engineer

Health Careers: HCS131 Computers in Health Care

Music: MUS156 Music Technology

Trade and Apprentice Education: TAFD117 Industrial Computer Applicatio

Accredited Programs

Henry Ford College is fully accredited by the Higher Learning Commission (HLC).

The College is a member of the Michigan Community College Association (MCCA) and the American Association of Community Colleges (AACC). Approval by the recognized accrediting agencies assures that HFC students' academic credentials, transcripts, and grades will be recognized by other accredited colleges and universities.

In addition to the College and all HFC programs receiving the highest level of HLC accreditation, all programs requiring individual accreditation are accredited by the premier professional organizations in their field.

Academic program accreditations and certifications

PROGRAM	ACCREDITING BODY	INITIAL ACCREDITATION	MOST RECENT ACCREDITATION	NEXT ACCREDITATION	NEXT SITE VISIT	CONTACT
Automotive Tech	National Automotive Technicians Education Foundation (NATEF) National Institute for Automotive Service Excellence (ASE)	2000	2016	2029	2029	National Automotive Technician Education Foundation (NATEF) 101 Blue Seal Dr. S.E. Suite 101 Leesburg, VA 20175 800-390-6789 National Institute for Automotive Service Excellence (ASE) 1503 Edwards Ferry Rd., NE Suite 401 Leesburg, VA 20176 703-669-6650
Automotive Service Program (ASSET)	National Automotive Technicians Education Foundation (NATEF) Board Ford Motor Company STST		2013	2029	2029	National Automotive Technician Education Foundation (NATEF) 101 Blue Seal Dr. S.E. Suite 101 Leesburg, VA 20175 800-390-6789
Baking and Pastry	American Culinary Federation Educational Foundation	2016	2016	2030	2030	American Culinary Federation Educational Foundation (ACF) 6816 Southpoint Pkwy Ste 400 Jacksonville, FL 32216 900-824-4468
Computer Information Systems – Cybersecurity	National Centers of Academic Excellence in Cybersecurity (NCAE-C) National Security Agency	2017	2017	2028	2028	National Security Agency ATTN: 12 9800 Savage Road Fort Meade, Maryland 20755-6000
Culinary Arts Outcome Data	American Culinary Federation Educational Foundation	1994	2023	2030	2030	American Culinary Federation Educational Foundation (ACF) 6816 Southpoint Pkwy Ste 400 Jacksonville, FL 32216 900-824-4468
Lactation Consultant	Commission on Accreditation of Allied Health Education Programs (CAAHEP), upon the recommendation of Lactation Education Accreditation and Approval Review Committee (LEAARC)	2019	2019	2025	2025	Commission on Accreditation of Allied Health Education Programs (CAAHEP) 9355 113th ST. N, #7709 Seminole, FL 33775 727-219-2350 Lactation Education Accreditation and Approval Review Committee (LEAARC) 110 Horizon Dr. St. 210 Raleigh, NC 27615 984-500-5902
Medical Assistant	Commission on Accreditation of Allied Health Programs (CAAHEP) upon recommendation of the Medical Assisting Education Review Board (MAERB)			2032	2032	Commission on the Accreditation of Allied Health Programs (CAAHEP) 9355 113th ST. N, #7709 Seminole, FL 33775 727-219-2350 Medical Assisting Education Review Board (MAERB) 2020 N. California Ave., 213 Suite 7 Chicago, IL 60647
Nursing Outcome Data	Accreditation Commission for Education in Nursing (ACEN)	2008	2024	2032	2032	Accreditation Commission for Education in Nursing (ACEN) 3390 Peachtree Road NE, Suite 1400 Atlanta, Georgia, 30326 404-975-5000
Ophthalmic Technician	Commission for Accreditation of Ophthalmic Medical Programs (CoA-OMP) Pending agency name change to International Council of Accreditation	2012	2025	2029	2029	Commission on Accreditation of Ophthalmic Medical Programs (CoA-OMP) 2025 Woodlane Dr. St. Paul, MN 55125 651-731-7245
Physical Therapist Assistant	Commission on Accreditation in Physical Therapy Education (CAPTE)	1992	2016 CAPTE	2026	Fall 2026	Commission on Accreditation in Physical Therapy Education (CAPTE) 3030 Potomac Ave., Suite 100 Alexandria, VA 22305-3085 800-999-2782
Radiographer	Joint Review Committee on Education in Radiologic Technology (JRCERT)	1997	2020 JCERT	2027	2027	Joint Review Committee on Education in Radiologic Technology (JRCERT) 20 N. Wacker Dr. Suite 2850 Chicago, IL 60606-3182 312-704-5300
Respiratory Therapist	Commission on Accreditation for Respiratory Care (CoARC)	1982	2017 CoARC	2027	2027	Commission on Accreditation for Respiratory Care (CoARC) 264 Precision Blvd Telford, TN 37690 817-283-2835
Surgical Technologist	Commission on Accreditation of Allied Health Programs (CAAHEP) upon recommendation of the Accreditation Review Council on Education in Surgical Technology and Surgical Assisting (ARC-STSA)		2012 ARC/STSA	2034	2034	Commission on Accreditation of Allied Health Programs (CAAHEP) 9355 113th ST. N, #7709 Seminole, FL 33775 727-219-2350 Accreditation Review Council on Education in Surgical Technology and Surgical Assisting (ARC-STSA) 19751 East Mainstreet, Suite 339 Parker, CO 80138 303-694-9262

School of Business, Entrepreneurship, and Professional Development

Building: Technology Bldg.

Office Location: E-211

Email Address: bepdinfo@hfcc.edu

Phone Number: 313-845-9645

Fax Number: 313-845-9778

Fall Hours

Monday - Friday: 8:00 am-4:30 pm

Winter Hours

Monday - Friday: 8:00 am-4:30 pm

Summer Hours

Monday - Thursday: 8:00 am-6:30 pm

Accounting

Career Opportunities:

- Bookkeeper, Accounts Payable/Receivable Clerk

Transfer Agreements:

- Bachelor of Business Administration - Accounting, Accounting Fraud Investigation, Finance, OR Honors Professional Accountancy 2+2 agreement with **Davenport University**
- Bachelor of Business Administration 2+2 agreement with **Eastern Michigan University**
- Bachelor of Science in Health Administration 3+1 agreement with **Eastern Michigan University**

Learn More About: Transfer Opportunities

Business Administration

Registry / Certification / Licensure Exam Information - Customer Service Professional Certificate Program:

Upon successful completion of this program, students qualify to test for the National Retail Federation (NRF) Foundation's Professional Certification in Customer Service, a nationally recognized skill standards and certification exam.

Transfer Agreements - Business Administration:

- Bachelor of Business Administration 2+2 agreement with **Davenport University**
- Bachelor of Business Administration 2+2 agreement with **Eastern Michigan University**
- Bachelor of Science in Health Administration 3+1 agreement with **Eastern Michigan University**
- Bachelor of Business Administration 2+2 agreement with **Oakland University**
- Bachelor of Business Administration 2+2 agreement with **University of Michigan - Dearborn**
- Bachelor of Business Administration 2+2 agreement with **University of Michigan - Flint**

Learn More About: Transfer Opportunities

Management

Transfer Agreements:

- Bachelor of Business Administration in Human Resource Management OR Management 2+2 with **Davenport University**
- Bachelor of Business Administration 2+2 with **Eastern Michigan University**

Learn More About: Transfer Opportunities

Paralegal

Career Opportunities - Paralegal Certificate Program:

Employment in a law office, in government, or in the private sector.

Transfer Agreements:

- Bachelor Degree (Many Programs) other agreement with **Davenport University**
- Bachelor of Science in Paralegal 2+2 agreement with **Eastern Michigan University**

Learn More About: Transfer Opportunities

Supply Chain Management

Career Opportunities - Supply Chain Management Certificate Program:

- Customer Service Manager
- International Logistics Manager
- Inventory Control Manager
- Logistics Engineer
- Logistics Manager
- Logistics Services Salesperson
- Logistics Software Manager
- Materials Manager
- Production Manager
- Purchasing Manager
- Supply Chain Analyst
- Supply Chain Consultant
- Supply Chain Manager
- Systems Support Manager
- Transportation Manager
- Vendor Managed Inventory Coordinator
- Warehouse Operations Manager

Occupational Exposure/Risk:

Varies by career in SCM. Operations, transportation, and warehouse management could have slightly greater physical risk than other positions within a firm.

Career Opportunities - Supply Chain Management Associate in Applied Science Program:

- Customer Service Manager
- International Logistics Manager
- Inventory Control Manager
- Logistics Engineer
- Logistics Manager
- Logistics Services Salesperson
- Logistics Software Manager
- Materials Manager
- Production Manager
- Purchasing Manager
- Supply Chain Analyst
- Supply Chain Consultant
- Supply Chain Manager
- Systems Support Manager
- Transportation Manager
- Vendor Managed Inventory Coordinator
- Warehouse Operations Manager

Occupational Exposure/Risk:

Varies by career in SCM. Operations, transportation, and warehouse management may have slightly greater physical risk than will purchasing, systems support, or a supply chain manager.

Transfer Agreements: Related to Supply Chain

- Bachelor of Business Administration 2+2 agreement with **Eastern Michigan University**

Transfer Agreements: Other Opportunities

- Bachelor of Science in Health Administration 2+2 agreement with **Eastern Michigan University**

Learn More About: Transfer Opportunities

CISCO Academy

Career Opportunities:

- PC Support Specialist
- Network Administrator
- Help Desk Technician
- Network Engineer
- Network Technician
- Other IT related fields

Learn More About: Transfer Opportunities

Computer Information Systems

Career Opportunities - Computer Science Associate in Science Program:

- Software Engineer
- Back-End Developer
- Back-End Engineer
- Web Developer
- DevOps Engineer
- Systems Analyst
- A.I. Engineer
- Data Scientist
- Mobile Developer
- Database Developer
- Database Administrator
- Business Intelligence Analyst

Career Opportunities - IT Help Desk Certificate Program:

- IT Help Desk Technician
- PC Support Specialist
- Network Administrator
- Computer Support Technician

Career Opportunities - Software Developer Certificate Program:

- Software Developer
- Software Engineer
- Application Developer
- Web Developer
- Mobile App Developer
- Database Developer
- Database Programmer
- Programmer

Career Opportunities - Software Engineering Associate in Applied Science Program:

- Application Developer
- A.I. Engineer
- Software Engineer
- Business Intelligence Analyst
- Backend Developer
- Programmer
- DevOps Engineer
- Systems Analyst
- Database Developer
- Database Administrator
- Data Scientist
- Mobile Developer
- Web Developer
- Project Manager

Career Opportunities - Web Development Associate in Applied Science Program:

Prepare graduates for an entry-level position as a Full Stack Web Developer, Web Administrator, or Web Programmer.

Career Opportunities - Computer Information Systems Web Development Certificate Program:

The U.S. Department of Labor, Bureau of Labor Statistics lists computer occupations as 5 out of the top 20 fastest growing occupations in the economy for 2004-2014. The Michigan Department of Labor and Economic Growth projects the highest number of new career opportunities between 2002 and 2012 (25.8%) to be in the computer and mathematics industries with an average starting salary of $62,000. Money Magazine and Salary.com 2006 Best Jobs in America report lists computer-related occupations as 2 of the top 7 career opportunities on the basis of salary, opportunities, advancement, creativity, flexibility, and stress.

- Web Administrator
- Webmaster
- Web Developer
- Multimedia Developer
- Web Programmer

Registry / Certification / Licensure Exam Information - Web Development Certificate Program:

CIW Foundations (http://www.ciwcertified.com/) CompTIA i-Net+ (http://www.comptia.org/) Adobe Certified Professional (https://learning.adobe.com/certification.html)

Transfer Agreements - Computer Information Systems:

- Bachelor Degree (Many Programs) other agreement with **Davenport University**
- Bachelor of Business Administration - Computer Information Systems 3+1 agreement with **Eastern Michigan University**

Transfer Agreements - Computer Science:

- Bachelor of Science in Computer Science: Applied 2+2 agreement with **Eastern Michigan University**
- Bachelor of Science in Computer Science: Curriculum 2+2 agreement with **Eastern Michigan University**

Transfer Agreements - Other Opportunities:

- Bachelor of Social Work 2+2 agreement with **Wayne State University**

Learn More About: Transfer Opportunities

Computer Networking

Career Opportunities:

- PC Hardware and Software Installation
- Computer Network Support Specialist
- Network Control and Systems Technician
- LAN/WAN Technician
- Hybrid Cloud Support Specialist
- Cloud Computing Resource Support
- Cloud Support Engineer
- Cloud Security Analyst

Registry / Certification / Licensure Exam Information:

Prepares students for a number of Industry Certification Exams, including:

- CompTIA A+
- CompTIA Cloud+
- Microsoft Hybrid Windows Server Administration
- Microsoft Azure Fundamentals
- AWS Certified Cloud Practitioner
- CompTIA Linux+
- Cisco Systems Certified Network Associate (CCNA)

Transfer Agreements:

- Bachelor of Science in Cybersecurity 3+1 agreement with **Eastern Michigan University**

Learn More About: Transfer Opportunities

CyberSecurity (IA)

Career Opportunities - Cybersecurity Certificate Program:

Information security professionals plan and carry out security measures to protect an organization's computer networks and systems. Their responsibilities are continually expanding as the number of cyber-attacks increases. There are many different careers paths to explore in Cybersecurity:

- Computer and Information Technology Occupations
- Cybersecurity Jobs, Burning Glass Technologies Research
- Network and Computer Systems Administrators, Salary Approximately $77,810
- Information Security Analysts, Salary Approximately $90,120
- Information Assurance Analyst, Salary Approximately $96,400
- Penetration Testers (Ethical Hackers), Salary Approximately $77,774
- Chief Information Security Officer, Salary Approximately $145,319

Additional Information:

- Detroit Free Press: The 10 hottest jobs in Michigan in 2015
- The Huffington Post: Research Supports Work of Community Colleges
- mLive: Detroit among 'fastest-growing cities for tech jobs,' CNN Money says
- Community college graduates in fields like IT can out-earn bachelor's degree holders

Career Opportunities - Cybersecurity Associate in Applied Science Program:

- Cybersecurity Technician
- Penetration Tester/Certified Ethical Hacker
- Network Security Specialist
- Secure Software Engineering

Transfer Agreements - Cybersecurity:

- Bachelor Degree (Many Programs) other agreement with **Davenport University**
- Bachelor of Science in Cybersecurity 2+2 agreement with **Eastern Michigan University**

Learn More About: Transfer Opportunities

DNU

Advanced Manufacturing

Learn More About: Transfer Opportunities

Architecture/Construction Tech

Career Opportunities:

- Appraiser
- Architectural CAD Technician
- Architectural Illustrator
- Building and Construction Technician
- Building Code Inspector
- Building Materials Sales Rep
- Builder
- Construction Estimator
- Civil Engineer Tech
- Facilities Management Technician
- Materials Testing Lab Technician
- Structural Steel Detailer

Transfer Agreements:

- Bachelor of Science in Construction Management 3+1 agreement with **Eastern Michigan University**

Learn More About: Transfer Opportunities

ASSET Program

Career Opportunities:

- Service Technician
- Service Manager

Learn More About: Transfer Opportunities

Automotive Technology

Career Opportunities - Certificate Program:

- Dynamometer Technician
- Parts Manager
- Product Test Technician
- Service Manager
- Service Technician

Career Opportunities - Associate in Applied Science Program:

- Diagnostic Technician
- Dynamometer Technician
- Parts Manager
- Product Test Technician
- Service Manager
- Service Technician

Learn More About: Transfer Opportunities

Electrical Engineering Technol

Career Opportunities - Electrical Engineering Technology Associate in Applied Science Program:

- Computer Service
- Instrumentation Set-up
- Machine Service
- Quality Control
- Research and Development
- Machine Controls
- Instrumentation Repair
- Microprocessor Systems
- Product Evaluation
- Sales
- Electrical Engineering Technician
- Electrical Technician
- Instrumentation
- Instrumentation Technician
- Instrumentation Controls Technician
- Controls Engineer (PLCs and Robotics)
- Controls PLC Engineer
- Controls System Technician
- Automation Technician
- Technical Support Technician
- System Control Technician
- Allen Bradley PLC
- Siemens PLC
- Siemens HMI
- Robot Technician
- Maintenance Technician
- Electrical Maintenance
- Electronic Technician
- Mechatronics
- Mechatronics Technician
- Low Voltage Technician
- Field Service Technician
- Field Service Engineer
- Control Systems

Transfer Agreements:

Learn More About: Transfer Opportunities

Energy Technology

Career Opportunities - HVAC Technician Certificate Program:

- HVAC Service Technician

Registry / Certification / Licensure Exam Information:

Students will receive industry recognized certificates, including: EPA 608 Refrigerant recovery, NATE: Ready to Work Certification, and Building Performance Institute (BPI) - Building Analyst certification

Learn More About: Transfer Opportunities

Interior Design

Career Opportunities - Kitchen and Bath Design Certificate Program:

- Kitchen and Bath Design and Retail Sales Consultant
- Kitchen and Bath Planner
- Independent Kitchen and Bath Designer
- Draftsperson
- Manufacturer's Representative

Career Opportunities - Interior Design Associate in Applied Science Program:

Students who complete this degree will have learned skills and abilities that will assist in seeking entry-level positions in the field of Interior Design and related disciplines or transfer to a four-year program. In addition, many of the core Interior Design courses will transfer to Eastern Michigan University and Wayne State University.

- Architectural Draftsperson
- Color Consultant
- Facility Manager
- Interior Designer
- Residential Designer
- Sales Representative:
    - Commercial Furniture Showroom
    - Home Furnishings
    - Manufacturers Representative

Prospective Interior Design majors should meet with the Interior Design Program Coordinator to discuss their program and sequence of study in that introductory courses may be offered in the Winter semester as well as the Fall. Call the Interior Design Program Coordinator at 313-845-9814 or e-mail crichert@hfcc.edu to schedule an appointment.

Learn More About: Transfer Opportunities

Machine Tool

Career Opportunities:

The courses required for this certificate are all accepted towards an associate degree to improve a student's employability. The certificate can be used as a building block toward an Associate's Degree in Science.

Learn More About: Transfer Opportunities

Skilled Trade & Apprenticeship

Learn More About: Transfer Opportunities

School of Health and Human Services

Building: Health Careers Education Ctr

Office Location: G-132

Email Address: hhsinfo@hfcc.edu

Phone Number: 313-845-9877

Fax Number: 313-317-6569 (Nursing: 313-845-9845)

Fall Hours

Monday - Friday: 8:00 am-4:30 pm

Winter Hours

Monday - Friday: 8:00 am-4:30 pm

Summer Hours

Monday - Thursday: 8:00 am-6:30 pm

Health Careers

Learn More About: Transfer Opportunities

Medical Office Assistant

Career Opportunities - Medical Office Assistant Certificate Program:

According to recent reports from the U.S. Bureau of Labor Statistics, employment of medical assistants is expected to grow much faster than the average for all occupations through 2030 as the health care industry expands because of technological advances in medicine and a growing aging population.

Employment growth will be driven by the increase in the number of group practices and other health care facilities that need a high proportion of support personnel, particularly the flexible medical assistant who can handle both administrative and clinical duties.

Medical assistants will have the opportunity, and skill sets to work both clinically and administratively in ambulatory care, hospitals, laboratories, and surgical clinics, while serving various specialties such as pediatrics, oncology, geriatrics, gynecology, and billing and coding facilities.

Information about career placement and job success is available through either the School of Health and Human Services Office or the College Placement Office.

Occupational Exposure/Risk:

Applicants who consider a career in medical assisting should be aware that during the course of their education and subsequent employment they are likely to working in situations where exposure to infectious diseases is possible. This is an occupational risk for all health care workers. Persons should not become health care workers unless they recognize and accept this risk. Proper education and strict adherence to well established infection-control guidelines can reduce the risk to a minimum. Thorough education in infection control procedures is an important part of the medical assistant program of study.

Latex Allergies:

Early recognition of sensitization to natural rubber latex (NRL) is crucial to prevent the occurrence of life-threatening reactions in sensitized healthcare workers. The Medical Assistant Program Faculty strongly advises that students sensitized or allergic to latex consult a physician for guidance on the merits of continuing in a healthcare career. NRL sensitized students who choose to continue in their program must notify the program director upon admission.

As with any healthcare position, there are certain occupational risks that come into play with being a medical assistant, and those hazards include the following:

- Exposure to infectious diseases
- Sharps injuries
- Bloodborne pathogens and biological hazards
- Chemical and drug exposure
- Ergonomic hazards from lifting, sitting, and repetitive tasks
- Latex allergies
- Stress

Registry / Certification / Licensure Exam Information:

Upon completion of the Medical Assistant Program, students graduating from medical assistant programs accredited through Commission on Accreditation of Health Education Programs (CAAHEP) or Accreditation Bureau of Health Education Schools (ABHES) are eligible to sit for either of the following certification examinations for medical assistants. Each credential is equal in weight, importance, and acceptance for future employment.
CMAs and RMAs receive a better salary than those without credentials. Employers prefer medical assistants from accredited programs with professional certification.

- The American Association of Medical Assistants (AAMA) offers the CMA (Certified Medical Assistant) examination. The CMA is a national certification.
- The American Medical Technologist (AMT) offers the RMA (Registered Medical Assistant) examination. The RMA credential is an international certification.

Program Completion Limits:

All educational experiences are under the guidance of the Medical Assistant program. Student progress is evaluated in the classroom, laboratory and clinical setting throughout the program. Progression in the program is based upon the student meeting the following requirements:

1. Adherence to the program requirements outlined in the Medical Assistant Student Handbook.
2. Achievement of a minimum grade of B- or better in all MOA and a C or better in required support courses.
3. All MOA courses taken at HFC must be successfully completed within three consecutive calendar years. The Medical Assisting program continuously updates its program of study to meet changing health care needs and the requirements of the accreditation agency and clinical affiliates; thus the College reserves the right to change policies at any time.

Transfer Agreements:

Learn More About: Transfer Opportunities

Ophthalmic Technician

Career Opportunities:

The Profession:

Ophthalmic Technicians are health professionals who are an integral part of the team of medical practitioners providing vision care. They perform administrative and clinical functions under the direction of medical or osteopathic physicians who provide comprehensive, refractive, medical, and surgical eye care to the public. Technicians provide administrative support services by coordinating clinic schedules, charting, coding, and transmitting orders of the physician. Clinical functions may be generalized or specialized. Duties may include calibrating and maintaining ophthalmic equipment and supplies, recording medical histories and vision, testing eye movements and binocular functions, measuring optical power and visual fields, assisting in minor and major eye surgery, and performing ocular imaging and biometry services as applicable by local law.

Ophthalmic technicians are employed primarily by ophthalmologists, medical institutions, clinics, hospitals, ambulatory surgery centers, university ophthalmology centers, or physician groups in which they may be assigned to an ophthalmologist responsible for their supervision and performance. They may be involved with the patients of an ophthalmologist in any setting for which the ophthalmologist is responsible.

Demand for ophthalmic medical technicians should remain strong due to the rising population of older persons, the segment of the population with increased frequency of chronic health conditions.

Occupational Exposure/Risk:

Applicants considering a career as an Ophthalmic Technician should be aware that during their course of study and in subsequent employment in the field, they are likely to work in situations where exposure to infectious disease is possible. This is an occupational risk for all health care workers. Persons should not become health care workers unless they recognize and accept this risk. Proper education and strict adherence to well established infection control guidelines can reduce the risk to a minimum. Thorough education in infection control procedures is an important part of the Ophthalmic Technician program.

Latex Allergies:

Early recognition of sensitization to natural rubber latex (NRL) is crucial to prevent the occurrence of life-threatening reactions in sensitized healthcare workers. The program faculty strongly advises that students sensitized or allergic to latex consult with a physician for guidance on the merits of continuing in a health care career. NRL sensitized students who choose to continue in Ophthalmic Technician program must notify the program director.

Program Completion Limits:

The Ophthalmic Technician AAS Degree (OPT) program is 23 months in length. Students must complete all OPT courses within three years of beginning the formal program. All courses in the OPT program must be completed with a C or better. Students are responsible for their own transportation to clinical sites and any expenses incurred.

The College continuously attempts to improve each program and as a result, courses and requirements may be modified. Curriculum, course content, and admission criteria are subject to change by action of the College faculty and administration. Contact the Health Careers Office at (313) 845-9877 for any current program updates or visit www. hfcc.edu.

Withdrawal and Readmission:

A students who fails one or both first semester OPT courses (OPT101 Intro to Ophthalmic Technology/OPT134 Ocular Anatomy and Pathology) must stop out of the program. Sequencing for OPT course work is not optional; courses are scheduled annually. Therefore, all students who fail a course must appeal for continuance with a remediation plan in writing. If a student fails a course on second attempt, they are out of the ophthalmic technician program.

Transfer Agreements:

Learn More About: Transfer Opportunities

Physical Therapy Assistant

Career Opportunities:

The Profession:

Physical Therapist Assistants (PTAs) are skilled health care providers who assist in providing planned patient care under the direction and supervision of a Physical Therapist. As members of the rehabilitation team, PTAs perform treatments designed to relieve pain, promote healing, and improve functional ability. Once a treatment plan is designed by a physical therapist, the PTA may be responsible for carrying out this treatment plan.

Opportunities:

Opportunities for PTAs are excellent at this time and are projected to increase through at least the year 2034. PTAs may choose to practice in a variety of settings including hospitals, rehab centers, sports medicine clinics, public and private schools, outpatient physical therapy clinics, nursing homes, and home health settings. Information about career placement and job success is available through either the Health Careers Office or the Career Services Office.

Occupational Exposure/Risk:

In physical therapy, both in school and on the job, exposure to infectious diseases may be minimal to moderate depending on the work setting. This is an occupational risk. Proper education and strict adherence to well established infection control guidelines, can further reduce the risk. Thorough education in infection control procedures is a part of the physical therapist assistant program of study.

Latex Allergies:

Early recognition of sensitization to natural rubber latex (NRL) is crucial to prevent the possible occurrence of life-threatening reactions in sensitized healthcare workers. The program faculty strongly advise that students sensitized or allergic to latex consult a physician for guidance on the merits of continuing in a health care career. NRL sensitized students who choose to continue in the physical therapist assistant program are to notify the program director.

Other Information:

The information represented here is for the current catalog year, if you were admitted prior to this year, please check your requirements under the Program Evaluation section of WebAdvisor.

The College continuously attempts to improve each program and as a result, courses and/or requirements may be modified. Curriculum, course content, and admission criteria are subject to change by action of the College faculty and administration.

PTA Program Complaint and Compliment Policy:

The Henry Ford College Physical Therapy Assistant AAS Degree Program wishes to be responsive to any substantive complaints or compliments regarding the program, its students, faculty, or graduates.

- Complaints or compliments about the program students should be given in writing to the PTA Program Director, Stephen Pedley (sepedley@hfcc.edu).
- Complaints or compliments about program faculty should be given in writing to the School of Health and Human Services Associate Dean, Cynthia Scheuer (cscheuer@hfcc.edu).
- Complaints about PTA program graduates should be directed to the Michigan Board of Physical Therapy: LARA-Physical Therapy

Registry / Certification / Licensure Exam Information:

Successful passage of the PTA Licensure Exam is required to practice in the State of Michigan. Students who are graduates of this program do qualify to sit for the National Physical Therapist Assistant Examination. Further details regarding this exam will be given as the student nears graduation.

Transfer Agreements:

- Bachelor of Science in Exercise Science 2+2 agreement with **Eastern Michigan University**

Learn More About: Transfer Opportunities

Pre-Education

Career Opportunities - Pre Elementary Education Associate in Arts Program:

Pre-Elementary Education program graduates may seek employment in child development centers. They are also able to work as an au pair, tutors, para-professionals, assistant pre-school teachers, and before/after school program group leaders in a variety of educational settings. For those wishing to teach in PK-6 schools, completion of a four-year teacher preparation program with teacher certification is necessary.

This degree requires coursework that can be transferred to most four-year teacher preparation programs without loss of credit. The elective component of this program allows students to select courses that apply toward the bachelor's degree at their intended transfer institution. Students are encouraged to consult the university guide sheets in the University Transfer, Advising, and Career Counseling Center located in Learning Resources Center.

Career Opportunities - Pre Secondary Education Associate in Arts Program:

Pre-Secondary Education program graduates who complete a bachelor degree with teacher certification may teach in middle schools or high schools.

This degree requires course work that can be transferred to most four-year teacher preparation programs without loss of credit. The elective component of this program allows students to select courses that apply toward the bachelor's degree at their intended transfer institution. Students are encouraged to consult the university guide sheets in the University Transfer, Advising, and Career Counseling Center located in Learning Resources Center.

Transfer Agreements:

HFC Pre-Elementary Education - Associate of Arts

- Bachelor of Arts in Elementary Education 2+2 agreement with **University of Michigan - Dearborn**
- Bachelor of Science in Elementary - Early Childhood Teaching and Learning with Certification 2+2 agreement with **Eastern Michigan University**

Learn More About: Transfer Opportunities

Health Careers

Learn More About: Transfer Opportunities

Radiography Technician

Career Opportunities:

The Profession:

Radiologic Technology is a segment of medicine devoted to patient diagnosis through the use of ionizing radiation. Specifically, radiation is used to create images of tissues, organs, bones, and vessels that comprise the human body. When requested by a physician, it is the radiographer who is responsible for creating these images in a safe and precise manner. The radiologist, a physician who is specifically trained in the interpretation of these images, performs diagnosis of the final image.

A major responsibility of the radiographer lies in the proper use of radiation. When not properly utilized, ionizing radiation has the potential to be damaging to both patient and user. Therefore, the radiographer is trained to understand radiation and be aware of its potential hazards. This knowledge serves to protect the patient and the radiographer, creating a safe work environment

Opportunities:

The job market for radiographers in southeastern Michigan is becoming increasingly more competitive. Information regarding employment trends for radiographers in Michigan is available through the HFC Placement Office (313) 845-9618.

A representative job profile for radiographer can be obtained through the Health Careers Office. Students requiring accommodation should directly contact the Assisted Learning Services at (313) 845-9617.

Occupational Exposure/Risk:

In Radiologic Technology, both in school and on the job, frequent exposure to radiation, sharps, patient secretions, bodily wastes, infectious patients, electricity, equipment noise, and latex is possible. These are occupational risks. Proper education in all areas and strict adherence to well established infection control guidelines can reduce the risk to a minimum. Thorough education in all areas, including infection control procedures, is an important part of the radiographer program.

Latex Allergy:

Early recognition of sensitization to natural rubber latex (NRL) is crucial to prevent the possible occurrence of life-threatening reactions in sensitized healthcare workers. The program faculty strongly advise that students sensitized or allergic to latex consult a physician for guidance on the merits of continuing in a health care career. NRL sensitized students who choose to continue in the radiographer program are to notify the program director.

Registry / Certification / Licensure Exam Information:

Students who intend to take the American Registry of Radiologic Technology Certification Examination are required to meet all general and ethical qualifications of the ARRT. A list of qualifications is included in the student handbook. Conviction of a crime may prevent a student from taking this examination. This material is also available upon request by calling the ARRT at (651) 687-0048 or online at www.arrt.org.

Program Completion Limits:

HFC continuously attempts to improve each program, and as a result courses and requirements may be modified. Curriculum, course content, and admission criteria are subject to change by action of the College faculty and administration.

Graduation:

In order to graduate from the Radiographer Program, students must meet all academic and clinical requirements.
Graduates of the Radiographer program will be awarded an Associate in Applied Science Degree. Graduates who intend to take the American Registry of Radiologic Technologists (ARRT) certification examination are required to meet all general and ethical qualifications of the ARRT.

A list of qualifications is available upon request at ARRT (651) 687-0048 or at www.arrt.org.

Health Care Coverage:

It is the student's responsibility to have health care coverage in place during the entire program. Hospitalization insurance can be purchased through the College.

Clinical Assignments:

Clinical rotations begin during the first semester and continue throughout the entire program. Clinical hours are generally 8:00 a.m. to 4:30 p.m. with specific days of assignment changing from semester to semester. Beginning in the 3rd semester of the program, students perform afternoon shift clinical rotations.

Transfer Agreements:

- Bachelor Degree (Many Programs) other agreement with **Davenport University**

Learn More About: Transfer Opportunities

Health Careers

Learn More About: Transfer Opportunities

Nursing

Career Opportunities:

Graduates can seek full-time employment upon passing the National Council Licensure Exam for Registered Nurses (NCLEX-RN). Opportunities for employment in nursing exist in hospitals, clinics, home care, factories, military services, schools, public health, and education settings. The Bureau of Labor Statistics predicts that employment in nursing will grow 12% between the years of 2018 and 2028. Many more opportunities in nursing are available with advanced education and experience.

Occupational Exposure/Risk:

Students in the nursing program must understand that they will be involved in the direct care of clients, including direct contact with all parts of the body. Because nurses are required to lift, move and transfer patients, stand for long periods of time, possess certain fine motor skills and sufficient visual acuity to care for patients, additional physical capabilities are required for entrance into the program. In order to be considered for admission to or retention in the Nursing Program, students must possess:

- Sufficient visual acuity necessary for accurate assessment and safe nursing care to clients, such as, physical assessment, preparation and administration of all medications and direct observation of clients.
- Sufficient auditory perception to receive verbal communication from clients and members of the health team and to assess client health status while using equipment and interpreting other noise stimuli (cardiac monitors, stethoscopes, intravenous infusion pumps, dopplers, fire alarms, call lights and cries for help).
- Sufficient gross/fine motor coordination to respond promptly and implement skills required in meeting health care needs of clients, including manipulation of equipment and supplies.
- Sufficient physical abilities to move around client's rooms, work in treatment areas and administer cardiopulmonary procedures.
- Sufficient strength to perform physical activities frequently requiring the ability to lift, push, pull objects more than fifty pounds and transfer objects and persons of more than one hundred pounds.
- Sufficient communication skills (speech, reading, writing) to interact with clients and communicate their health status and needs promptly and effectively.
- Sufficient intellectual and emotional capability to plan and implement care for clients.
- Sufficient psychological stability essential to perform at the required levels in the clinical portions of the nursing program.
- Ability to sustain long periods of concentration to make decisions regarding correct techniques, use of equipment, and proper care of clients.
- Sufficient physical stamina to remain standing for long periods of time.

Applicants considering a career in nursing may also be exposed to infectious diseases during their course of study and in subsequent employment in the field and are likely to work in situations where exposure to infectious disease is possible. This is an occupational health risk for all health care workers. Persons should not become health care workers unless they recognize and accept this risk. Proper education and strict adherence to well established infection-control guidelines can reduce this risk to a minimum. Thorough education in infection control procedures is an important part of the nursing program of study.

Registry / Certification / Licensure Exam Information:

The nursing program prepares graduates for entry-level positions in the nursing profession.

Successful completion of the program of study qualifies graduates to receive an Associate in Applied Science Degree and apply to take the National Council Licensure Examination for Registered Nurses (NCLEX-RN) leading to state license as a registered nurse.

The Michigan State Board of Nursing regulates the licensing and can deny RN licensure for a number of reasons; for example, conviction of a misdemeanor or a felony. Prior to beginning the Nursing program, students are advised to visit the Michigan website or call the Michigan Board of Nursing regarding eligibility for licensing.

Henry Ford College's nursing program prepares you to take the NCLEX exam in the state of Michigan. Graduates who want to practice in other states should review those requirements via that Board of Nursing. For additional information, please contact the National Council of State Boards of Nursing.

Program Completion Limits:

The College and the Nursing Faculty reserve the right to make policy and program changes at any time to comply with requirements of accrediting agencies, clinical facilities, or the college, and to meet the changing health care needs of society. Requirement changes, updates, and all information regarding the Nursing program can be obtained through the Nursing Student Success Navigator located in the Welcome Center Advising area on main campus.

Transfer Agreements:

- Bachelor Science in Health Services Administration, Medical Case Management, OR Nursing 2+2 agreement with **Davenport University**
- Bachelor of Science in Nursing 3+1 agreement with **Eastern Michigan University**
- Bachelor of Science in Nursing 3+1 agreement with **Michigan State University**
- Bachelor of Science in Nursing 3+1 agreement with **Olivet College**
- Bachelor of Science in Nursing 2+2 agreement with **Oakland University**
- Bachelor of Science in Nursing 3+1 agreement with **University of Michigan - Flint**

Learn More About: Transfer Opportunities

School of Liberal Arts

Building: Liberal Arts Building

Office Location: K-201 and F-138

Email Address: lainfo@hfcc.edu

Phone Number: 313-845-9624

Fax Number: 313-845-6362

Fall Hours

Monday - Friday: 8:00 am-4:30 pm

Winter Hours

Monday - Thursday: 8:00 am-4:30 pm

Summer Hours

Monday - Thursday: 8:00 am-6:30 pm

Note

Online or by Phone only hours:
Friday: 8:00 a.m. - 4:30 p.m.

American Sign Language

Learn More About: Transfer Opportunities

English

Learn More About: Transfer Opportunities

English Language Institute

Learn More About: Transfer Opportunities

Language Studies

Learn More About: Transfer Opportunities

Anthropology

Learn More About: Transfer Opportunities

Criminal Justice

Career Opportunities:

- Federal Law Enforcement
- Police Officer
- Private Security
- State Law Enforcement

Transfer Agreements: Criminal Justice

- Bachelor Degree (Many Programs) other agreement with **Davenport University**
- Bachelor of Arts in Criminology and Criminal Justice 2+2 agreement with **Eastern Michigan University**
- Bachelor of Science in Criminal Justice 3+1 agreement with **Madonna University**
- Bachelor of Arts in Criminology and Criminal Justice 2+2 agreement with **University of Michigan - Dearborn**

Transfer Agreements: Other Opportunities

- Bachelor of Science in Health Administration 3+1 agreement with **Eastern Michigan University**
- Bachelor of Social Work 2+2 agreement with **Wayne State University**

Learn More About: Transfer Opportunities

Geography

Learn More About: Transfer Opportunities

Humanities

Learn More About: Transfer Opportunities

Philosophy

Learn More About: Transfer Opportunities

Political Science

Learn More About: Transfer Opportunities

Sociology

Learn More About: Transfer Opportunities

Art (Art History)

Explore: Ceramics | Henry Ford College

Explore: Studio Art | Henry Ford College

Career Opportunities:

Designed as a transfer program into a Bachelor of Fine Arts program:

- Studio Artist
- College Professor (with BFA and MFA in studio, or PhD in Art History)
- Museum or Gallery Work (with BFA)

Learn More About: Transfer Opportunities

Graphic Design

Career Opportunities - Graphic Design Career Associate in Applied Arts Program:

- Production Designer
- Graphic Designer
- Visual Designer
- Communication Design
- Front-End Web Designer
- Content Management Design
- Illustrator
- Animator
- Motion Designer
- Content Developer
- Layout Artist
- Social Media Designer

Learn More About: Transfer Opportunities

Journalism

Career Opportunities - Journalism Certificate Program:

- Advertising
- Author
- Business Administration
- Business & Technical Writing
- Broadcast News
- Civil Service
- Communications
- Correspondent
- Criminal Justice
- Editor
- Freelance Journalist
- Graphic Design
- Marketing
- Media Writer
- Pre-Law
- Publishing
- Public Relations
- Reporter
- Teacher
- Telecommunications

Learn More About: Transfer Opportunities

Media Communication Arts

Career Opportunities - Media Communication Arts Associate in Arts Program:

- Management: Producer, Director, or Program Coordinator
- Production: Video or Television Producer, Director, Camera Operator, Audio or Radio Producer or Editor
- Writing: Screenwriter, Script Writer, Media Theorist, Media Critic or Broadcast/News Journalist
- Talent: Radio, TV, or Voiceover Announcer, Broadcast Journalist, Interviewer or Performer

Learn More About: Transfer Opportunities

Music

Explore: Recording Arts | Henry Ford College

Career Opportunities - Recording Arts Certificate Program:

- Studio recording engineer
- Studio recording technician
- Studio mixing engineer
- Studio assistant engineer/technician
- Studio producer

Registry / Certification / Licensure Exam Information - Recording Arts Certificate Program:

As part of the curriculum for MUS-192 and MUS-292 Students will have the opportunity to take Avid Pro Tools Certification Exams to become Avid Pro Tools Certified. Exams must be proctored by an Avid Certified Instructor from an Avid Learning Partner such as Henry Ford College. The cost of exams are included in the cost of required textbooks for the courses. Exams are optional and are not part of the program's requirements.

Career Opportunities - Music Associate in Arts Program:

- Church music director
- Community music director
- Freelance musician
- Music retail
- Private music instructor

Transfer Agreements:

Learn More About: Transfer Opportunities

Theater

Transfer Agreements:

- Bachelor Degree (Many Programs) other agreement with **Davenport University**
- Bachelor of Science in Health Administration 3+1 agreement with **Eastern Michigan University**
- Bachelor of Social Work 2+2 agreement with **Wayne State University**

Learn More About: Transfer Opportunities

School of Science, Technology, Engineering, and Mathematics

Building: Health Careers Education Ctr

Office Location: G-110, G-122 and J-115

Email Address: steminfo@hfcc.edu

Phone Number: 313-845-9632

Fax Number: 313-317-4089

Fall Hours

Monday - Thursday: 8:00 am-6:30 pm
Friday: 8:00 am-4:30 pm

Winter Hours

Monday - Thursday: 8:00 am-6:30 pm
Friday: 8:00 am-4:30 pm

Summer Hours

Monday - Thursday: 8:00 am-6:30 pm
Friday: 8:00 am-4:30 pm

Note

Office hours vary between locations. Please call or email before visiting.

Biology

Career Opportunities:

The nature of this program is to serve as a transfer degree into a 4-year or longer degree at another college or university.

Transfer Agreements:

- Bachelor of Science in Biology 2+2 agreement with **University of Detroit Mercy**
- Bachelor of Science in Biological Laboratory Science 2+2 agreement with **Davenport University**

Learn More About: Transfer Opportunities

Environmental Studies

Career Opportunities - Environmental Studies Associate in Science Program:

Some occupations of bachelor-level environmental studies majors are:

- Teacher
- National park naturalist
- Resource policy planner
- Air quality analyst
- Regional land use planner
- Public health officer
- Public interest group director

Transfer Agreements: Related

- Bachelor of Science Biochemistry, Biology, Chemistry, Bachelor of Arts Chemistry 2+2 agreement with **University of Detroit Mercy**

Transfer Agreements: Other

- Bachelor of Social Work 2+2 agreement with **Wayne State University**

Learn More About: Transfer Opportunities

Science Education

Career Opportunities - Science Associate in Science Program:

The nature of this program is to serve as a transfer degree into a 4-year or longer degree at another college or university.

Transfer Agreements:

- Bachelor of Social Work 2+2 agreement with **Wayne State University**

Learn More About: Transfer Opportunities

Astronomy

Learn More About: Transfer Opportunities

Geology

Learn More About: Transfer Opportunities

Chemistry

Career Opportunities:

The nature of this program is to serve as a transfer degree into a 4-year or longer degree at another college or university.

Transfer Agreements:

- Bachelor of Science in Biological Laboratory Science 2+2 agreement with **Davenport University**
- Bachelor of Science Biochemistry, Biology, Chemistry, Bachelor of Arts Chemistry 2+2 agreement with **University of Detroit Mercy**
- Bachelor of Social Work 2+2 agreement with **Wayne State University**

Learn More About: Transfer Opportunities

Pre-Engineering

Career Opportunities - Engineering Technology - Mechanical Associate in Applied Science Program:

- Mechanical Engineering Technician
- Mechanical Service Technician
- Mechanical Assembly Technician
- Mechanical Trades Technician

Career Opportunities - Engineering Technology Pathway Mechanical/Electrical Associate in Science Program:

After completion of this program and transfer to and completion of the 4-year institution Bachelor of Science degree, students can specialize in fields such as Mechanical or Electrical Engineering Technology.

Career Opportunities - Engineering Technology Construction Management Associate in Applied Science Program:

- Architectural CAD Technician
- Construction Services Technician
- Construction Engineering Technician
- Residential Maintenance Technician
- Design Technician

Explore: Pre-Engineering | Henry Ford College

Career Opportunities - Pre-Engineering: General - Associate in Science Program:

After completion of program and transfer to a 4-year institution, engineering students can specialize in fields such as:

- Aerospace
- Biomedical
- Chemical
- Computer and electrical
- Industrial
- Mechanical
- Civil, including structural, transportation, environmental, geotechnical, urban planning, and water resources.

Transfer Agreements:

HFC Pre-Engineering: General - Associate of Science

- Bachelor of Science in Electrical & Computer Engineering 2+2 agreement with **Eastern Michigan University**
- Bachelor of Science in Electrical Engineering 2+2 agreement with **Wayne State University**
- Bachelor of Science in Mechanical Engineering 2+2 agreement with **Eastern Michigan University**
- Bachelor of Science in Mechanical Engineering 2+2 agreement with **Wayne State University**

HFC Pre-Engineering: Electrical / Computer - Associate of Applied Science

- Bachelor of Science in Electrical & Computer Engineering 2+2 agreement with **Eastern Michigan University**
- Bachelor of Science in Computer Engineering 2+2 agreement with the **University of Michigan - Dearborn**
- Bachelor of Science Electrical Engineering 2+2 agreement with the **University of Michigan - Dearborn**
- Bachelor of Science Robotics Engineering 2+2 agreement with the **University of Michigan - Dearborn**
- Bachelor of Science Electrical Engineering 2+2 agreement with **Wayne State University**

HFC Pre-Engineering: Mechanical / Industrial - Associate of Applied Science

- Bachelor of Science in Mechanical Engineering 2+2 agreement with **Eastern Michigan University**
- Bachelor of Science in Mechanical Engineering 2+2 agreement with the **University of Michigan - Dearborn**
- Bachelor of Science in Industrial Systems Engineering 2+2 agreement with the **University of Michigan - Dearborn**
- Bachelor of Science in Manufacturing Engineering 2+2 agreement with the **University of Michigan - Dearborn**
- Bachelor of Science in Bioengineering 2+2 agreement with the **University of Michigan - Dearborn**
- Bachelor of Science in Mechanical Engineering 2+2 agreement with **Wayne State University**

Learn More About: Transfer Opportunities

Accounting Department

Career Opportunities:

- Bookkeeper, Accounts Payable/Receivable Clerk

Transfer Agreements:

- Bachelor of Business Administration - Accounting, Accounting Fraud Investigation, Finance, OR Honors Professional Accountancy 2+2 agreement with **Davenport University**
- Bachelor of Business Administration 2+2 agreement with **Eastern Michigan University**
- Bachelor of Science in Health Administration 3+1 agreement with **Eastern Michigan University**

Learn More About: Transfer Opportunities

Programs

ACCOUNTING.CA - Accounting
ACCTG.AB - Accounting

Courses

BAC110 - Practical Accounting
BAC131 - Introduction to Financial Accounting
BAC132 - Introduction to Managerial Accounting
BAC141 - Computerized Accounting-QuickBooks
BAC231 - Asset Accounting
BAC235 - Tax Accounting
BAC262 - Cost Accounting

Adv Transportation & Mobility Department

Learn More About: Transfer Opportunities

Advanced Manufacturing Department

Learn More About: Transfer Opportunities

Courses

ICO190 - Co-op in Industrial Technology
ICO290 - Co-op in Industrial Technology

Allied Health Department

Learn More About: Transfer Opportunities

Courses

AH132 - Introduction to Healthcare Professions
EMS100 - EMT-Basic Fundamentals
EMS109 - Emt-Basic Clinical Externship
EMS200 - Paramedic I
EMS206 - Paramedic Procedures Lab I
EMS210 - Paramedic II
EMS216 - Paramedic Procedures Lab II
EMS220 - Paramedic III
EMS226 - Paramedic Procedures Lab III
EMS230 - Paramedic IV
EMS240 - Paramedic V
EMS291 - Paramedic Clinical I
EMS292 - Paramedic Clinical II
EMS293 - Paramedic Clinical III
HCS103 - Employment Skills for Health Careers
HCS124 - Basic Health Assessment
HCS131 - Computers in Health Care

American Sign Language Department

Learn More About: Transfer Opportunities

Courses

ASL130 - Deaf Culture and the Deaf Community
ASL131 - Elementary American Sign Language I
ASL132 - Elementary American Sign Language II
ASL135 - Fingerspelling and Numbering
ASL140 - Fingerspelling and Numbering
ASL231 - Intermediate American Sign Language I
ASL232 - Intermediate American Sign Language II

Anthropology Department

Learn More About: Transfer Opportunities

Courses

ANTH131 - Introduction to Anthropology
ANTH151 - Cultures of North America
ANTH152 - Middle Eastern Peoples and Cultures
ANTH153 - Introduction to Archaeology
ANTH154 - Food, Culture, and Economy

Architecture/Construction Tech Department

Career Opportunities:

- Appraiser
- Architectural CAD Technician
- Architectural Illustrator
- Building and Construction Technician
- Building Code Inspector
- Building Materials Sales Rep
- Builder
- Construction Estimator
- Civil Engineer Tech
- Facilities Management Technician
- Materials Testing Lab Technician
- Structural Steel Detailer

Transfer Agreements:

- Bachelor of Science in Construction Management 3+1 agreement with **Eastern Michigan University**

Learn More About: Transfer Opportunities

Programs

ARCON.AAS - Architecture/Construction Technology
CIVILENGINTECH.AAS - Civil Engineering Technology

Courses

ACT190 - Co-op in Architecture Construction Tech
ACT290 - Co-op in Architecture Construction Tech
ACT297 - Spec Topics in Architectur/Construction
ACT298 - Spec Topics in Arch/Construction
BLDA100 - Introduction to Autocad
BLDA110 - Visual Communications
BLDA120 - Introduction to Carpentry
BLDA130 - Introduction to Revit
BLDA135 - Soils and Foundations
BLDA140 - Construction Systems 1
BLDA150 - Environmental Bldg Systems
BLDA230 - Residential Studio
BLDA240 - Construction Systems 2
BLDA250 - Surveying & Site Design
BLDA260 - Construction Estimating
BLDA265 - Civil Technology Studio
BLDA270 - Commercial Design Studio
BLDA280 - Bldg Science Capstone

Art (Art History) Department

Explore: Ceramics | Henry Ford College

Explore: Studio Art | Henry Ford College

Career Opportunities:

Designed as a transfer program into a Bachelor of Fine Arts program:

- Studio Artist
- College Professor (with BFA and MFA in studio, or PhD in Art History)
- Museum or Gallery Work (with BFA)

Learn More About: Transfer Opportunities

Programs

STUDIOART.AFA - Studio Art

Courses

ART101 - Two-Dimensional Design
ART102 - Drawing I
ART104 - Color Theory
ART105 - Three-Dimensional Design
ART112 - Drawing II
ART113 - Life Drawing I
ART116 - Painting I
ART121 - Art History I - Pre-Historic to Medieval
ART122 - Art History Survey II
ART123 - History of Modern Art
ART135 - Art Appreciation
ART141 - Ceramics I
ART142 - Ceramics II
ART150 - Digital Photography I
ART161 - Darkroom Photography
ART190 - Co-Op in Graphic Design
ART213 - Life Drawing II
ART216 - Painting II
ART221 - Medieval Art
ART224 - Art of Islam
ART225 - Asian Art: Art of India & SE Asia
ART226 - African and Afro American Art
ART227 - History of Arab Art & Architecture
ART228 - Arabic Calligraphy
ART229 - Survey of Contemporary Art
ART242 - Ceramics III
ART250 - Digital Photography II
ART261 - Darkroom Photography II
ART273 - Studio Art Capstone
ART2913 - Directed Study in Painting
ART2933 - Directed Study in Drawing
ART2936 - Topics in Studio Art
ART2953 - Advanced Study in Ceramics

Asset Program Department

Career Opportunities:

- Service Technician
- Service Manager

Learn More About: Transfer Opportunities

Programs

ASSET.AAS - Automotive Service (ASSET)

Courses

AUTO191 - Coordinated Education Experience Auto 1
AUTO192 - Coordinated Education Experience Auto 2
AUTO291 - Coordinated Education Experience Auto 3
AUTO292 - Coordinated Education Experience Auto 4

Astronomy Department

Learn More About: Transfer Opportunities

Courses

ASTR131 - Descriptive Astronomy
ASTR133 - Introductory Astronomy Laboratory

Automotive Technology Department

Career Opportunities - Certificate Program:

- Dynamometer Technician
- Parts Manager
- Product Test Technician
- Service Manager
- Service Technician

Career Opportunities - Associate in Applied Science Program:

- Diagnostic Technician
- Dynamometer Technician
- Parts Manager
- Product Test Technician
- Service Manager
- Service Technician

Learn More About: Transfer Opportunities

Programs

AUTOT.AAS - Automotive Technology
AUTOT.CA - Automotive Technology

Courses

AUTO101 - Automotive Fundamentals
AUTO102 - Auto Fundamentals&Dealership Operations
AUTO103 - Intro Auto Industry & Auto Maintenance
AUTO105 - Internal Combustion Engines
AUTO108 - Basic Automotive Electricity
AUTO110 - Automotive Electrical Systems
AUTO120 - Automotive Fuel Management Systems
AUTO121 - Electronic Fuel & Emissions Control Syst
AUTO131 - Automotive Ignition Systems
AUTO132 - Computer Controld Ignition Sys&engin Per
AUTO135 - Mathematics for the Technician
AUTO140 - Automotive Transmissions Systems
AUTO142 - Automatic Transmission Controls/Diagnosi
AUTO145 - Manual Transmissions and Transaxles
AUTO150 - Automotive Diagnosis & Engine Eval
AUTO160 - Automotive Chassis Units
AUTO162 - Antilock Brake Systems
AUTO165 - Electronic Steering and Suspension
AUTO181 - Technical Automotive Welding
AUTO190 - Co-op in Automotive Technology
AUTO215 - Automotive Engine Dynamometer
AUTO216 - Chassis Dynamometer
AUTO224 - Automotive Air Conditioning
AUTO225 - Automotive Air Conditioning
AUTO230 - Automotive Diesel Principles
AUTO231 - Diesel Engine Performance & Diagnosis
AUTO237 - Comput Engine/Veh Netwrk, Prg, & Sec Sys
AUTO260 - Hybrid and Electric Vehicle Systems
AUTO262 - Electronic Automotive Chassis
AUTO290 - Co-op in Automotive Technology
AUTO293 - Auto Technology Service Experience Lab I
AUTO294 - Auto Technology Serv Experience Lab II
AUTO297 - Spec Topics in Automotive Technology
AUTO298 - Spec Topics in Automotive Technology

Biology Department

Career Opportunities:

The nature of this program is to serve as a transfer degree into a 4-year or longer degree at another college or university.

Transfer Agreements:

- Bachelor of Science in Biology 2+2 agreement with **University of Detroit Mercy**
- Bachelor of Science in Biological Laboratory Science 2+2 agreement with **Davenport University**

Learn More About: Transfer Opportunities

Programs

BIOLOGY.AS - Biology

Courses

BIO130 - Evolution and Behavior
BIO131 - Introduction to Biology
BIO134 - Essentials of Anatomy and Physiology
BIO135 - Microbiology for Allied Health Sciences
BIO143 - Zoology
BIO150 - Biology: Organisms, Genes, and Ecology

BIO152 - Cell and Molecular Biology
BIO233 - Anatomy and Physiology I
BIO234 - Anatomy and Physiology II
BIO251 - Microbiology
BIO270 - Exercise Physiology
SCI210 - Intro to Science for Elementary Educator

Business Administration Department

Registry / Certification / Licensure Exam Information - Customer Service Professional Certificate Program:

Upon successful completion of this program, students qualify to test for the National Retail Federation (NRF) Foundation's Professional Certification in Customer Service, a nationally recognized skill standards and certification exam.

Transfer Agreements - Business Administration:

- Bachelor of Business Administration 2+2 agreement with **Davenport University**
- Bachelor of Business Administration 2+2 agreement with **Eastern Michigan University**
- Bachelor of Science in Health Administration 3+1 agreement with **Eastern Michigan University**
- Bachelor of Business Administration 2+2 agreement with **Oakland University**
- Bachelor of Business Administration 2+2 agreement with **University of Michigan - Dearborn**
- Bachelor of Business Administration 2+2 agreement with **University of Michigan - Flint**

Learn More About: Transfer Opportunities

Programs

BUSAD.AB - Business Administration
CUSRV.CA - Customer Service Professional
GENRL.AB - General Business

Courses

BBA110 - Business Grammar and Punctuation
BBA131 - Introduction to Business
BBA133 - Business Behavior and Communication
BBA153 - Customer Service
BBA159 - Contact Center/Help Desk Practicum
BBA231 - Business Communications
BBA252 - Principles of Marketing
BCA100 - Computer Basics
BCA143 - Word Processing
BCA145 - Spreadsheets
BCO190 - Co-op in Business
BCO191 - Co-op in Business
BCO290 - Co-op in Business
BMA110 - Business Math

CISCO Academy Department

Career Opportunities:

- PC Support Specialist
- Network Administrator
- Help Desk Technician
- Network Engineer
- Network Technician
- Other IT related fields

Learn More About: Transfer Opportunities

Programs

COMPNET.CA - Computer Networking Academy - CCNA

Courses

CNT110 - CCNA: Networking I
CNT120 - CCNA: Networking II
CNT210 - CCNA: Networking III
CNT220 - CCNA: Networking IV
CNT260 - Network Security

Camp Henry Department

Career & Tech Ed (Non-Credit) Department

Chemistry Department

Career Opportunities:

The nature of this program is to serve as a transfer degree into a 4-year or longer degree at another college or university.

Transfer Agreements:

- Bachelor of Science in Biological Laboratory Science 2+2 agreement with **Davenport University**
- Bachelor of Science Biochemistry, Biology, Chemistry, Bachelor of Arts Chemistry 2+2 agreement with **University of Detroit Mercy**
- Bachelor of Social Work 2+2 agreement with **Wayne State University**

Learn More About: Transfer Opportunities

Programs

CHEMISTRY.AS - Chemistry

Courses

CHEM111 - Chem Skills Pre-Professional Programs
CHEM131 - Principles of Chemistry
CHEM132 - Principles Organic&Biological Chemistry
CHEM141 - Principles Gen & Inorganic Chemistry I
CHEM142 - Principles Gen & Inorganic Chemistry II
CHEM241 - Organic Chemistry I
CHEM242 - Organic Chemistry II
CHEM243 - Microscale Organic Chemistry Lab I
CHEM244 - Microscale Organic Chemistry Lab II

Computer Information Systems Department

Career Opportunities - Computer Science Associate in Science Program:

- Software Engineer
- Back-End Developer
- Back-End Engineer

- Web Developer
- DevOps Engineer
- Systems Analyst
- A.I. Engineer
- Data Scientist
- Mobile Developer
- Database Developer
- Database Administrator
- Business Intelligence Analyst

Career Opportunities - IT Help Desk Certificate Program:

- IT Help Desk Technician
- PC Support Specialist
- Network Administrator
- Computer Support Technician

Career Opportunities - Software Developer Certificate Program:

- Software Developer
- Software Engineer
- Application Developer
- Web Developer
- Mobile App Developer
- Database Developer
- Database Programmer
- Programmer

Career Opportunities - Software Engineering Associate in Applied Science Program:

- Application Developer
- A.I. Engineer
- Software Engineer
- Business Intelligence Analyst
- Backend Developer
- Programmer
- DevOps Engineer
- Systems Analyst
- Database Developer
- Database Administrator
- Data Scientist
- Mobile Developer
- Web Developer
- Project Manager

Career Opportunities - Web Development Associate in Applied Science Program:

Prepare graduates for an entry-level position as a Full Stack Web Developer, Web Administrator, or Web Programmer.

Career Opportunities - Computer Information Systems Web Development Certificate Program:

The U.S. Department of Labor, Bureau of Labor Statistics lists computer occupations as 5 out of the top 20 fastest growing occupations in the economy for 2004-2014. The Michigan Department of Labor and Economic Growth projects the highest number of new career opportunities between 2002 and 2012 (25.8%) to be in the computer and mathematics industries with an average starting salary of $62,000. Money Magazine and Salary.com 2006 Best Jobs in America report lists computer-related occupations as 2 of the top 7 career opportunities on the basis of salary, opportunities, advancement, creativity, flexibility, and stress.

- Web Administrator
- Webmaster
- Web Developer
- Multimedia Developer
- Web Programmer

Registry / Certification / Licensure Exam Information - Web Development Certificate Program:

CIW Foundations (http://www.ciwcertified.com/) CompTIA i-Net+ (http://www.comptia.org/) Adobe Certified Professional (https://learning.adobe.com/certification.html)

Transfer Agreements - Computer Information Systems:

- Bachelor Degree (Many Programs) other agreement with **Davenport University**
- Bachelor of Business Administration - Computer Information Systems 3+1 agreement with **Eastern Michigan University**

Transfer Agreements - Computer Science:

- Bachelor of Science in Computer Science: Applied 2+2 agreement with **Eastern Michigan University**
- Bachelor of Science in Computer Science: Curriculum 2+2 agreement with **Eastern Michigan University**

Transfer Agreements - Other Opportunities:

- Bachelor of Social Work 2+2 agreement with **Wayne State University**

Learn More About: Transfer Opportunities

Programs

CISWEBDEV.AAS - Computer Information Systems - Web Development
COMPSCIENCE.AS - Computer Science
ITHELPDESK.CA - IT Help Desk
SOFTWAREENGINEER.AAS - Software Engineering
SWDEV.CA - Software Developer
WEBDEV.CA - Computer Information Systems - Web Development

Courses

CIS100 - Introduction to Information Technology
CIS109 - Apple Support
CIS111 - SQL for Database Development
CIS112 - Introduction to Networking
CIS113 - Wireless LANs
CIS119 - Math for Computer Professional
CIS122 - Web Internet Technologies
CIS125 - Principles of Programming Logic
CIS126 - HTML/CSS Web Programming
CIS129 - Intro to UNIX With Shell Scripting
CIS130 - C# Programming
CIS141 - Introduction to Mobile Appl Development
CIS147 - Hybrid Cloud I
CIS159 - A+ Technical Support
CIS167 - Cloud Computing
CIS170 - C Programming
CIS171 - Java Programming
CIS172 - JavaScript
CIS190 - Co-op in Computer Information Systems
CIS211 - Web Server Administration
CIS221 - Instructional Tech Educators (Pre K-12)
CIS222 - Web Database Development with PHP
CIS225 - Web Frameworks
CIS227 - Content Management Systems
CIS229 - UNIX System Administration
CIS230 - C++ Programming
CIS232 - Advanced C# Database Programming
CIS241 - Advancd Mobile App Developmnt (Android)
CIS242 - Voice Over IP (VoIP)
CIS243 - Advanced Mobile App Development (iOS)
CIS247 - Hybrid Cloud II
CIS270 - Oracle Database Administration
CIS271 - Advanced Java
CIS272 - Project Management
CIS276 - Digital Forensics
CIS280 - Information Assurance and Security
CIS290 - Co-op in Computer Information Systems
CIS294 - Software Engineering
CIS295 - Network Design and Implementation
CIS296 - Information Assurance Methodology
CIS297 - Spec Topics in Comp Information Systems
CIS298 - Spec Topics in Comp Information Systems
CIS299 - Spec Topics in Comp Info Systems

Computer Networking Department

Career Opportunities:

- PC Hardware and Software Installation
- Computer Network Support Specialist
- Network Control and Systems Technician
- LAN/WAN Technician
- Hybrid Cloud Support Specialist
- Cloud Computing Resource Support
- Cloud Support Engineer
- Cloud Security Analyst

Registry / Certification / Licensure Exam Information:

Prepares students for a number of Industry Certification Exams, including:

- CompTIA A+
- CompTIA Cloud+
- Microsoft Hybrid Windows Server Administration
- Microsoft Azure Fundamentals
- AWS Certified Cloud Practitioner
- CompTIA Linux+
- Cisco Systems Certified Network Associate (CCNA)

Transfer Agreements:

- Bachelor of Science in Cybersecurity 3+1 agreement with **Eastern Michigan University**

Learn More About: Transfer Opportunities

Counseling Department

Learn More About: Transfer Opportunities

Courses

COLL101 - College Success
COLL103 - College Reconnect
COUN110 - Human Potential Seminar
COUN111 - Advanced Human Potential Seminar
COUN114 - Stress Management - A Personal Approach
COUN115 - Assertiveness Training
COUN116 - Assertiveness in Daily Living
COUN118 - Assertiveness at Work
COUN119 - Issues in Personal Growth
COUN120 - Career Exploration
COUN125 - Life Work Planning
COUN127 - Job Interview Counseling
COUN128 - Active Parenting
COUN129 - Personality Type and Success

Criminal Justice Department

Career Opportunities:

- Federal Law Enforcement
- Police Officer
- Private Security
- State Law Enforcement

Transfer Agreements: Criminal Justice

- Bachelor Degree (Many Programs) other agreement with **Davenport University**
- Bachelor of Arts in Criminology and Criminal Justice 2+2 agreement with **Eastern Michigan University**
- Bachelor of Science in Criminal Justice 3+1 agreement with **Madonna University**
- Bachelor of Arts in Criminology and Criminal Justice 2+2 agreement with **University of Michigan - Dearborn**

Transfer Agreements: Other Opportunities

- Bachelor of Science in Health Administration 3+1 agreement with **Eastern Michigan University**
- Bachelor of Social Work 2+2 agreement with **Wayne State University**

Learn More About: Transfer Opportunities

Programs

LAWEF.AA - Criminal Justice - Law Enforcement
LAWEFPA.AA - Criminal Justice - Law Enforcement with Police Academy

Courses

CRJ126 - Introduction to Homeland Security
CRJ131 - Intro Law Enforcement & Criminal Justice
CRJ132 - Police Admin - Staff and Line Operations
CRJ134 - Criminal Investigation
CRJ135 - Juvenile Justice
CRJ136 - Introduction to Corrections
CRJ138 - Probation and Parole
CRJ140 - Identity Theft: Prevention and Awareness
CRJ234 - Criminalistics: Criminal Investigation
CRJ251 - Criminal Law
CRJ252 - Criminal Procedure
CRJ285 - Topics in Criminal Justice/Law Enfor
CRJ287 - Police Academy
CRJ291 - Criminal Justice Internship 1
CRJ292 - Criminal Justice Internship 2

Culinary Arts, Hospitality Mgm Department

Explore: Culinary Arts | Henry Ford College

Explore: Hotel / Restaurant Management | Henry Ford College

Career Opportunities - Culinary Arts Associate in Applied Science Program:

Coupled with diverse line level work experience, the student completing this degree may want to consider entry-level supervisory or management position in these areas:

- Full Service Hotels◇
- Resort and Travel Destinations
- Fine Dining Restaurants◇
- Health Care Services
- College and University Dining◇

- Casinos
- Conference Centers
- Food Sales and Marketing
- School Food Service
- Catering
- Casual Dining Restaurants
- Sports, Leisure, and Event Services

Career Opportunities - Culinary Arts Bachelor of Science Program:

Chef Manager, Sous Chef, Executive Chef, Restaurant Manager, Hotel Manager

Registry / Certification / Licensure Exam Information - Culinary Arts Bachelor of Science Program:

National Restaurant Association (Serv-Safe Food Safety, Serv-Safe Alcohol) American Culinary Federation (Culinary Arts AAS, Certified Culinarian)

Career Opportunities - Hotel Services Certificate Program:

- Hotel Associate
- Front Office Lead Associate
- Housekeeping Lead Associate
- Concierge
- Guest Services Lead Associate

Career Opportunities - Hotel/Restaurant Management Associate in Applied Science Program:

Coupled with diverse line level work experience, the student completing this degree may want to consider entry-level supervisory or management position in the following areas:

- Full service hotels
- Restaurants
- Event planning
- Non-commercial food service
- Facilities management
- Limited service hotels
- Food sales and marketing
- Corporate travel
- Meeting and hotel sales

Transfer Agreements - Bachelor's Degree Program: Culinary

- Master of Business Administration (MBA) other agreement with **Wayne State University**

Learn More About: Transfer Opportunities

Programs

BAKING.CA - Baking and Pastry
CULIN.AAS - Culinary Arts
CULIN.BS - Culinary Arts
CULSK.CA - Culinary Skills
HRMGT.AAS - Hotel/Restaurant Management
HTLSRVCS.CA - Hotel Services
RESTSER.CA - Restaurant Service

Courses

HOSP101 - Wines of the World
HOSP103 - Major Wines Grape Varieties
HOSP105 - Applied Food Service Sanitation
HOSP107 - Artisanal Cheese and Craft Beer
HOSP145 - Ice Carving and Design
HOSP190 - Co-op in Hospitality
HOSP211 - Introduction to the Hospitality Industry
HOSP215 - International Cooking
HOSP220 - Introduction to Baking and Cooking
HOSP221 - Front Office Procedures & Guest Service
HOSP224 - Culinary Skills and Nutritional Cooking
HOSP226 - Fundamentals of Baking
HOSP235 - Ice Carving for the Professional
HOSP245 - Hotel and Restaurant Desserts
HOSP250 - Hospitality and Travel Marketing
HOSP251 - Dining Room Service and Operations
HOSP255 - Professional Cake Decorating
HOSP270 - Facilities Management
HOSP290 - Co-op in Hospitality
HOSP309 - Meetings and Event Planning
HOSP310 - Hospitality Supervision and Leadership
HOSP325 - Dining Room Captain
HOSP330 - Food and Nutrition
HOSP331 - Modern and European Pastry
HOSP340 - A'la Carte and Buffet Cookery
HOSP341 - Garde Manger & Menu Planning
HOSP360 - Hospitality Purchasing
HOSP370 - Food and Beverage Controls
HOSP421 - Professional Strategies for Culinarians
HOSP490 - Co-Op in Culinary Arts

CyberSecurity (IA) Department

Career Opportunities - Cybersecurity Certificate Program:

Information security professionals plan and carry out security measures to protect an organization's computer networks and systems. Their responsibilities are continually expanding as the number of cyber-attacks increases. There are many different careers paths to explore in Cybersecurity:

- Computer and Information Technology Occupations
- Cybersecurity Jobs, Burning Glass Technologies Research
- Network and Computer Systems Administrators, Salary Approximately $77,810
- Information Security Analysts, Salary Approximately $90,120
- Information Assurance Analyst, Salary Approximately $96,400
- Penetration Testers (Ethical Hackers), Salary Approximately $77,774
- Chief Information Security Officer, Salary Approximately $145,319

Additional Information:

- Detroit Free Press: The 10 hottest jobs in Michigan in 2015
- The Huffington Post: Research Supports Work of Community Colleges
- mLive: Detroit among 'fastest-growing cities for tech jobs,' CNN Money says
- Community college graduates in fields like IT can out-earn bachelor's degree holders

Career Opportunities - Cybersecurity Associate in Applied Science Program:

- Cybersecurity Technician
- Penetration Tester/Certified Ethical Hacker
- Network Security Specialist
- Secure Software Engineering

Transfer Agreements - Cybersecurity:

- Bachelor Degree (Many Programs) other agreement with **Davenport University**
- Bachelor of Science in Cybersecurity 2+2 agreement with **Eastern Michigan University**

Learn More About: Transfer Opportunities

Programs

CYBERSECUR.CA - Cybersecurity
INFOCYBRSCR.AAS - Computer Information Systems - Cybersecurity

Electrical Engineering Technol Department

Career Opportunities - Electrical Engineering Technology Associate in Applied Science Program:

- Computer Service
- Instrumentation Set-up
- Machine Service
- Quality Control
- Research and Development
- Machine Controls
- Instrumentation Repair
- Microprocessor Systems
- Product Evaluation
- Sales
- Electrical Engineering Technician
- Electrical Technician
- Instrumentation
- Instrumentation Technician
- Instrumentation Controls Technician
- Controls Engineer (PLCs and Robotics)
- Controls PLC Engineer
- Controls System Technician
- Automation Technician
- Technical Support Technician
- System Control Technician
- Allen Bradley PLC
- Siemens PLC
- Siemens HMI
- Robot Technician
- Maintenance Technician
- Electrical Maintenance
- Electronic Technician
- Mechatronics
- Mechatronics Technician
- Low Voltage Technician
- Field Service Technician
- Field Service Engineer
- Control Systems

Transfer Agreements:

Learn More About: Transfer Opportunities

Programs

ELECENGINTECH.AAS - Electrical Engineering Technology
ELECENGINTECH.CA - Electrical Engineering Technology
EVBATTERY.CA - EV Battery Manufacturing Technology

Courses

CIMEL101 - Instruments
CIMEL102 - Control Circuits and Components
CIMEL103 - Solid State Devices
CIMEL104 - Controls and Instrumentation-Fundamental
CIMEL105 - Sensors and Photoeyes
CIMEL107 - Final Control Elements
CIMEL108 - Introduction to PLCs
CIMEL109 - Plc Hardware and Software
CIMEL110 - Programming PLCs
CIMEL111 - PLC Communication
CIMEL112 - Introduction to Robotics
CIMEL113 - Programming/Editing Robots
CIMEL114 - Robot Maintenance and PM
CIMEL115 - Error Codes and Troubleshooting
CIMEL116 - Integration of PLCs & Robots
ELEC103 - Basic Electricity
ELEC106 - Basic Electronics
ELEC115 - Digital Circuits 1
ELEC120 - Basic Hydraulics
ELEC145 - AC/DC Rotating Machinery
ELEC161 - Fluid/Pneumatic Power Systems Certificat
ELEC185 - Pneumatics
ELEC195 - AC/DC Circuit Analysis
ELEC200 - Ladder Diagrams & Motor Controls
ELEC235 - Siemens PLC/HMI Programming
ELEC245 - Programmable Controllers
ELEC255 - Instrumentation Systems
ELEC260 - Automation Controls and Robotics
ELEC265 - Basic Troubleshooting 101
ELEC270 - Instrumentation II LabVIEW Programming
ELEC276 - Elec Sys Analysis, Design & Troubleshoot
ELEC290 - Co-op in Electrical Technology
ELEC297 - Spec Topics in Electrical Technology
ELEC298 - Spec Topics in Electrical Technology
ELEC299 - Special Topics

Energy Technology Department

Career Opportunities - HVAC Technician Certificate Program:

- HVAC Service Technician

Registry / Certification / Licensure Exam Information:

Students will receive industry recognized certificates, including: EPA 608 Refrigerant recovery, NATE: Ready to Work Certification, and Building Performance Institute (BPI) - Building Analyst certification

Learn More About: Transfer Opportunities

Programs

HVACTECH.CA - HVAC Technician

Courses

BLDE100 - Energy Industry Fundamentals
BLDE101 - Introduction to Energy Technology
BLDE103 - AC/DC Electricity
BLDE115 - Heating Technology
BLDE131 - Heating Technology
BLDE150 - Construction Blueprint Reading
BLDE151 - Air Conditioning Technology
BLDE200 - Commercial Heating
BLDE202 - Electric Field Service Meterin
BLDE203 - Natural Gas Distribution and Maintenance
BLDE205 - Refrigeration Technology
BLDE207 - Underground Distribution
BLDE208 - Overhead Distribution
BLDE240 - Energy Systems Design
BLDE250 - Energy Audit & Certification
BLDE260 - Energy Systems Management
BLDE282 - Substation Operation and Maintenance
BLDE295 - N American Technician Excellence Certifi
BLDE298 - Special Topics in Energy Technology
BLDE299 - Special Topics in Energy Technology
MFMT151 - Power Engin Stationary Steam Core Skills
MFMT224 - Automated Control Systems I
MFMT241 - Power Engin Refrigeration License Review
MFMT248 - Power Engineering - Steam License Review
PLMB101 - Fundamentals of Plumbing & Pipefitting
PLMB110 - Drains, Wastes, and Vents
PLMB115 - Water Supply & Distribution Systems
PLMB118 - Plumbing, Pipefitting Material Joining
PLMB120 - Steam and Hot Water Systems
PLMB225 - Plumbing Design
PLMB240 - Plumbing Materials & Components
PLMB250 - Plumbing Pipefitting Code
PLMB255 - Plumbing Fixture Installation
PLMB275 - Pract Plumbing Lab-State License Prep
REEN110 - Geothermal Sys & Water Furnace Tech
REEN120 - Wind, Solar, and Fuel Cell Technology
REEN130 - Smart Home Control Technology
REEN140 - Cogeneration and Backup Power
REEN160 - Energy Auditing/Weatherization
REEN161 - Energy Aud/Weatherization Certificat Lab
REEN170 - Battery Technologies
REEN180 - Hydropower

English Department

Learn More About: Transfer Opportunities

Courses

ENG090A - Academic Literacies
ENG094 - Accelerated Learning Program:read&writin
ENG095E - ALP for ELL: Reading & Writing
ENG131 - Introduction to College Writing
ENG131A - Introduction to College Writing (ALP)
ENG131E - Intro to College Writing (ALP) for ELLs
ENG131H - Honors Introduction to College Writing
ENG132 - College Writing and Research
ENG132H - Honors College Writing and Research
ENG135 - Business & Technical Writing & Research
ENG139 - Creative Writing
ENG231 - Intro to Literature: Poetry and Drama
ENG232 - Introduction to the Short Story
ENG233 - Introduction to the Novel
ENG234 - Topics in Literature
ENG235 - American Literature Before 1900
ENG236 - American Autobiography
ENG237 - American Literature Since 1900
ENG241 - Shakespeare
ENG243 - Women's Literature
ENG245 - The Bible as Literature
ENG246 - Introduction to Children's Literature
ENG248 - African American Literature

English Language Institute Department

Learn More About: Transfer Opportunities

Courses

ELI101C - ELL Communication 1
ELI101R - ELL Reading & Listening 1
ELI101W - ELL Writing & Grammar 1
ELI102C - ELL Communication 2
ELI102R - ELL Reading & Listening 2
ELI102W - ELL Writing & Grammar 2
ELI103C - ELL Communication 3
ELI103R - ELL Reading & Listening 3
ELI103W - ELL Writing & Grammar 3
ELI104C - ELL Communication 4
ELI104R - ELL Reading & Listening 4
ELI104W - ELL Writing & Grammar 4
ELI105C - ELL Communication 5
ELI105R - ELL Reading & Study Skills 5
ELI105W - ELL Writing & Grammar 5
ELI106C - ELL Communication 6
ELI106R - ELL Reading & Study Skills 6
ELI106W - ELL Writing & Grammar 6
ELL130 - Academic Writing and Reading for Ell
ELL182 - Academic Reading for the ELL
ELL192 - Academic Writing for the ELL

Environmental Studies Department

Career Opportunities - Environmental Studies Associate in Science Program:

Some occupations of bachelor-level environmental studies majors are:

- Teacher
- National park naturalist
- Resource policy planner

- Air quality analyst
- Regional land use planner
- Public health officer
- Public interest group director

Transfer Agreements: Related

- Bachelor of Science Biochemistry, Biology, Chemistry, Bachelor of Arts Chemistry 2+2 agreement with **University of Detroit Mercy**

Transfer Agreements: Other

- Bachelor of Social Work 2+2 agreement with **Wayne State University**

Learn More About: Transfer Opportunities

Programs

ENVIRN.AS - Environmental Studies

Courses

BIO138 - Environmental Science Lecture
BIO139 - Environmental Science Laboratory

Exercise Science Department

Career Opportunities - Exercise Science Associate in Science Program:

A graduate of the exercise program will be able transfer successfully to a 4-year institution to complete a bachelor's degree in Exercise Science or related field of study. After completion of this Associate of Science pathway, students could find employment in entry level positions in the fitness industry.

HPE170 Principles Personal Training: Principles of Personal Training course will prepare students to sit for the for the ACSM and other national certification exams, leading to employment (micro credential).

Learn More About: Transfer Opportunities

Programs

EXERCISESCIENCE.AS - Exercise Science
SPORTSMGMT.AA - Sports Management

Courses

HPE130 - Stress Management
HPE141 - Introduction to Health and Wellness
HPE151 - Methods for Teaching Exercise
HPE158 - Introduction to Nutrition
HPE162 - Introduction to Exercise Science
HPE170 - Principles of Personal Training
HPE175 - Introduction to Sports Management
HPE200 - Exercise Facility, Equipment, and Safety
HPE212 - Measurement & Prescription of Fitness &
HPE224 - Sports Facilities
HPE253 - Nutrition for the Professional
HPE258 - Principles of Strength Training
HPE262 - Health & Phys Ed for Elementary Teachers
HPE270 - Exercise Physiology
HPEA110 - Volleyball I
HPEA117 - Strength Training & Physical Cond I
HPEA122 - Yoga-Based Fitness
HPEA155 - Relaxation Techniques for Stress Mgmt.
HPEA210 - Volleyball II
HPEA217 - Strength Training & Physical Condit II

General Studies Department

Transfer Agreements:

- Bachelor Degree (Many Programs) other agreement with **Davenport University**
- Bachelor of Arts in Computer Science 2+2 agreement with **Eastern Michigan University**

Learn More About: Transfer Opportunities

Geography Department

Learn More About: Transfer Opportunities

Courses

GEOG131 - Environmental Geography
GEOG132 - World Regional Geography
GEOG138 - Geography of Michigan
GEOG221 - Geography of the Middle East

Geology Department

Learn More About: Transfer Opportunities

Courses

GEOL131 - Physical Geology

Graphic Design Department

Career Opportunities - Graphic Design Career Associate in Applied Arts Program:

- Production Designer
- Graphic Designer
- Visual Designer
- Communication Design
- Front-End Web Designer
- Content Management Design
- Illustrator
- Animator
- Motion Designer
- Content Developer
- Layout Artist
- Social Media Designer

Learn More About: Transfer Opportunities

Programs

GRPHDSGNCAREER.AAA - Graphic Design Career

Courses

ART107 - Photoshop
ART108 - Introduction to Animation
ART111 - Digital Media
ART114 - Graphic Design Studio 1
ART117 - Story Boarding for Design
ART130 - History of Graphic Design
ART165 - Typography
ART214 - Graphic Design Studio 2
ART245 - Interactive Experience Design
ART255 - Time Based Graphics
ART265 - Illustration
ART272 - Design Entrepreneur
ART275 - Advanced Projects

Health Careers Department

Learn More About: Transfer Opportunities

Programs

CERTLC.CA - Lactation Consultant
PHARM.AS - Pre-Pharmacy

Courses

AH100 - Medical Terminology
AH105 - Basic Life Support Healthcare Providers
AH121 - Basic Lactation Concepts
AH122 - Applied Principles of Breastfeeding
AH131 - Medicolegal Principles Hlthcr Practition
AH141 - Introduction to Public Health
AH151 - Introduction to Community Health
AH190 - Lactation Consultant Practicum
AH192 - Lactation Consultant Adv Practicum Pathw

History Department

Learn More About: Transfer Opportunities

Courses

HIST111 - Ancient World History
HIST112 - Medieval-Early Modern World History
HIST113 - Modern World History
HIST151 - Early American History
HIST152 - Modern American History
HIST254 - History of Michigan
HIST258 - The Revolutionary War Era
HIST261 - The Modern Middle East
HIST270 - The American Civil War
HIST285 - The U S and the Second World War
HIST286 - The U S and the Vietnam War

Honors Program Department

Transfer Agreements: Honors Programs

- Honors College agreement with **Eastern Michigan University**
- Honors College agreement with **Wayne State University**

Learn More About: Transfer Opportunities

Courses

HON151 - Honor Colloquium-History Culture Detroit
HON161 - Honors Colloquium
HON231 - Honors Directed Study
HON232 - Honors Directed Study
HON233 - Honors Directed Study
HON234 - Honors Directed Study
HON235 - Honors Directed Study Abroad
HON236 - Honors Directed Study - Service Learning
HON251 - Great Works

Humanities Department

Learn More About: Transfer Opportunities

Courses

HUM101 - Introduction to the Humanities
HUM105 - World Civilization I
HUM204 - Introductio to American Cultural Studies
HUM251H - Great Works

Industrial Drafting/CAD Techn Department

Learn More About: Transfer Opportunities

Courses

DRAF110 - Introduction to Industrial Drafting
DRAF120 - Introduction to CAD
DRAF122 - Solidworks Level I- Introduction
DRAF123 - Introduction to CATIA V5
DRAF124 - Solidworks Level II - Advanced
DRAF125 - CATIA V5 Level II
DRAF126 - Solidworks Level III - Applications
DRAF127 - CATIA V5 Level III
DRAF130 - Technical Descriptive Geometry
DRAF131 - UG NX Level I - Introduction
DRAF132 - UG NX Level II - Intermediate
DRAF133 - UG NX Level III - Advanced
DRAF134 - UG NX Level IV - Applications
DRAF142 - Industrial Detailing
DRAF210 - Die Design
DRAF220 - Machine Element Drafting
DRAF230 - Jigs, Fixtures, and Tools
DRAF240 - Product Drawing
DRAF255 - Advanced Techniques
DRAF260 - Advanced CAD Application Solid Modeling
DRAF297 - Spec Topics Industrial Drafting Technolo
DRAF298 - Spec Topics Industrial Drafting Technolo

Industrial Technology Department

Learn More About: Transfer Opportunities

Courses

TECH101 - Introduction to Industrial Technology
WELD100 - Weld Joint Design and Preparation
WELD110 - Shielded Metal Arch Welding
WELD120 - Gas Tungsten Arc Welding
WELD130 - Gas Metal Arc Welding
WELD140 - Weld Metallurgy (Ferrous Metals)
WELD141 - Weld Metallurgy (Non-Ferrous Metals)
WELD210 - Pipe Welding
WELD220 - Tool & Die Welding
WELD230 - Welding Certficate Preparation/Practice
WELD242 - Weld Metallurgy (Weld Test Procedure)
WELD260 - Welding Fabrication Project

Interior Design Department

Career Opportunities - Kitchen and Bath Design Certificate Program:

- Kitchen and Bath Design and Retail Sales Consultant
- Kitchen and Bath Planner
- Independent Kitchen and Bath Designer
- Draftsperson
- Manufacturer's Representative

Career Opportunities - Interior Design Associate in Applied Science Program:

Students who complete this degree will have learned skills and abilities that will assist in seeking entry-level positions in the field of Interior Design and related disciplines or transfer to a four-year program. In addition, many of the core Interior Design courses will transfer to Eastern Michigan University and Wayne State University.

- Architectural Draftsperson
- Color Consultant
- Facility Manager
- Interior Designer
- Residential Designer
- Sales Representative:
    - Commercial Furniture Showroom
    - Home Furnishings
    - Manufacturers Representative

Prospective Interior Design majors should meet with the Interior Design Program Coordinator to discuss their program and sequence of study in that introductory courses may be offered in the Winter semester as well as the Fall. Call the Interior Design Program Coordinator at 313-845-9814 or e-mail crichert@hfcc.edu to schedule an appointment.

Learn More About: Transfer Opportunities

Programs

INDSG.AAS - Interior Design
KITBTHDSN.CA - Kitchen & Bath Design

Courses

BLDI120 - Principles of Design
BLDI130 - Design & User Needs
BLDI140 - Interior Design Materials & Components
BLDI150 - Lighting & Environmental Systems Interio
BLDI200 - Bath Design Studio
BLDI220 - Kitchen Design Studio
BLDI230 - Residential Design Studio
BLDI270 - Commercial Design Studio
BLDI290 - Professional Practice Interior Designers
INTR181 - Principles of Design
INTR294 - Kitchen and Bath Internship

Journalism Department

Career Opportunities - Journalism Certificate Program:

- Advertising
- Author
- Business Administration
- Business & Technical Writing
- Broadcast News
- Civil Service
- Communications
- Correspondent
- Criminal Justice
- Editor
- Freelance Journalist
- Graphic Design
- Marketing
- Media Writer
- Pre-Law
- Publishing
- Public Relations
- Reporter
- Teacher
- Telecommunications

Learn More About: Transfer Opportunities

Programs

GENRLJOURNALISM.AA - Liberal Arts - Journalism
JOURNALISM.CA - Journalism

Courses

COMM151 - Introduction to Social Media
COMM190 - Co-op in Communications
COMM290 - Co-op in Communications
JOUR131 - News Writing
JOUR292 - Journalism Experience-Online News Writin

Language Studies Department

Learn More About: Transfer Opportunities

Programs

DEAFSTUDIESCOMM.CA - Deaf Studies and the Community

Courses

ARA130 - Pre-Elementary Arabic
ARA131 - Elementary Arabic I
ARA132 - Elementary Arabic II
ARA231 - Intermediate Arabic I
ARA232 - Intermediate Arabic II
FRE131 - Elementary French I
FRE132 - Elementary French II
FRE231 - Second-Year French III
FRE232 - Second-Year French IV
GER131 - Elementary German I
GER132 - Elementary German II
GER231 - Second-Year German III
GER232 - Second-Year German IV
ITAL131 - Elementary Italian I
ITAL132 - Elementary Italian II
SPN130 - Introduction to Hispanic Cultures
SPN131 - Elementary Spanish I
SPN132 - Elementary Spanish II
SPN141 - Elementary Spanish Conversation
SPN231 - Intermediate Spanish I
SPN232 - Intermediate Spanish II
SPN290 - StudyAbroad Spanish Lang&Hispan Culture

Liberal Arts Department

Learn More About: Transfer Opportunities

Programs

GENRL.AA - Liberal Arts
GENRL.AGS - General Studies
MITRANSAGREEMENT.CA - Michigan Transfer Agreement

Machine Tool Technology Department

Career Opportunities:

The courses required for this certificate are all accepted towards an associate degree to improve a student's employability. The certificate can be used as a building block toward an Associate's Degree in Science.

Learn More About: Transfer Opportunities

Programs

CNCAD.CA - Advanced Machine Tool Technology / CNC
DSGNMANFCT.AAS - Design and Manufacturing

Courses

MTT100 - Machine Tool Processes I
MTT102 - Hand and Power Tools
MTT105 - Print Reading for Manufacturing
MTT110 - Machine Tool Processes II
MTT120 - Practical Problems in Machine Tools I
MTT130 - Quality Control Gaging & Inspection
MTT140 - Introduction to CNC
MTT145 - CNC Operations
MTT146 - Introduction to Machine Tool Probing
MTT147 - Basic Macro Programming for CNC
MTT148 - Advanced CNC Probing
MTT150 - Statistical Process Ctrl (SPC) in Manf
MTT160 - Computer Assisted N/C Programming
MTT170 - Advanced Computer Assisted N/C Program
MTT275 - Advanced CNC Operations
MTT297 - Special Topics in Machin Tool Technology
MTT298 - Special Topic in Mach Tool Technology

Management Department

Transfer Agreements:

- Bachelor of Business Administration in Human Resource Management OR Management 2+2 with **Davenport University**
- Bachelor of Business Administration 2+2 with **Eastern Michigan University**

Learn More About: Transfer Opportunities

Programs

MNGMT.AB - Management
SMBUSMGMT.CA - Small Business Management & Entrepreneurship
SUPERVISION.CA - Supervision

Courses

MGT230 - Principles of Management
MGT231 - Leadership and Teambuilding
MGT237 - Organizational Behavior
MGT241 - Small Bus Mgt & Entrepreneurship

Mathematics Department

Learn More About: Transfer Opportunities

Courses

MATH010 - Algebra Skills
MATH031 - Quantitative Reasoning Skills Review
MATH041 - Introductory Statistics Skills
MATH095 - Bridge to Success in Mathematics
MATH100 - Basic Technical Mathematics
MATH101 - Mathematics for Health Careers
MATH103 - Technical Mathematics
MATH104 - Mathematics for Food Service Careers
MATH110 - Intermediate Algebra
MATH112 - Trigonometry
MATH115 - College Algebra
MATH122 - Mathematics for Elementary Teachers I
MATH131 - Mathematics for the Modern World
MATH141 - Introduction to Statistics
MATH165 - Mathematics for Calculus
MATH175 - Precalculus
MATH180 - Calculus I
MATH183 - Calculus II
MATH222 - Mathematics for Elementary Teachers II
MATH275 - Discrete Mathematics
MATH280 - Calculus III
MATH283 - Linear Algebra
MATH288 - Differential Equations

Media Communication Arts Department

Career Opportunities - Media Communication Arts Associate in Arts Program:

- Management: Producer, Director, or Program Coordinator
- Production: Video or Television Producer, Director, Camera Operator, Audio or Radio Producer or Editor
- Writing: Screenwriter, Script Writer, Media Theorist, Media Critic or Broadcast/News Journalist
- Talent: Radio, TV, or Voiceover Announcer, Broadcast Journalist, Interviewer or Performer

Learn More About: Transfer Opportunities

Programs

MEDIACOMM.AA - Media Communication Arts

Courses

MCA131 - Intoduction to Media Communication
MCA132 - Film History and Criticism
MCA151 - Digital Audio Editing
MCA157 - Digital Video Editing
MCA189 - Introduction to WHFR Radio
MCA235 - Topics in Film and Media
MCA241 - Media Writing
MCA243 - Media Performance
MCA251 - Audio Production
MCA257 - Video Production
MCA258 - Advanced Media Production
MCA261 - Broadcast Journalism
MCA281 - Media Communication Arts Capstone
MCA294 - Media Communication Arts Internship
MCA295 - Media Communication Arts Directed Study
TCM131 - Introduction to Telecommunication
TCM132 - Film History and Criticism
TCM151 - Digital Audio Editing
TCM157 - Digital Video Editing
TCM189 - WHFR Staff Training
TCM235 - Topics in Film Study
TCM241 - Media Writing
TCM243 - Media Performance
TCM251 - Audio Production
TCM257 - Video Production I
TCM258 - Film/Video Production II
TCM261 - Broadcast Journalism
TCM281 - Capstone
TCM294 - Telecommunication Internship
TCM295 - Directed Study

Medical Office Assistant Department

Career Opportunities - Medical Office Assistant Certificate Program:

According to recent reports from the U.S. Bureau of Labor Statistics, employment of medical assistants is expected to grow much faster than the average for all occupations through 2030 as the health care industry expands because of technological advances in medicine and a growing aging population.

Employment growth will be driven by the increase in the number of group practices and other health care facilities that need a high proportion of support personnel, particularly the flexible medical assistant who can handle both administrative and clinical duties.

Medical assistants will have the opportunity, and skill sets to work both clinically and administratively in ambulatory care, hospitals, laboratories, and surgical clinics, while serving various specialties such as pediatrics, oncology, geriatrics, gynecology, and billing and coding facilities.

Information about career placement and job success is available through either the School of Health and Human Services Office or the College Placement Office.

Occupational Exposure/Risk:

Applicants who consider a career in medical assisting should be aware that during the course of their education and subsequent employment they are likely to working in situations where exposure to infectious diseases is possible. This is an occupational risk for all health care workers. Persons should not become health care workers unless they recognize and accept this risk. Proper education and strict adherence to well established infection-control guidelines can reduce the risk to a minimum. Thorough education in infection control procedures is an important part of the medical assistant program of study.

Latex Allergies:

Early recognition of sensitization to natural rubber latex (NRL) is crucial to prevent the occurrence of life-threatening reactions in sensitized healthcare workers. The Medical Assistant Program Faculty strongly advises that students sensitized or allergic to latex consult a physician for guidance on the merits of continuing in a healthcare career. NRL sensitized students who choose to continue in their program must notify the program director upon admission.

As with any healthcare position, there are certain occupational risks that come into play with being a medical assistant, and those hazards include the following:

- Exposure to infectious diseases
- Sharps injuries
- Bloodborne pathogens and biological hazards
- Chemical and drug exposure
- Ergonomic hazards from lifting, sitting, and repetitive tasks
- Latex allergies
- Stress

Registry / Certification / Licensure Exam Information:

Upon completion of the Medical Assistant Program, students graduating from medical assistant programs accredited through Commission on Accreditation of Health Education Programs (CAAHEP) or Accreditation Bureau of Health Education Schools (ABHES) are eligible to sit for either of the following certification examinations for medical assistants. Each credential is equal in weight, importance, and acceptance for future employment.
CMAs and RMAs receive a better salary than those without credentials. Employers prefer medical assistants from accredited programs with professional certification.

- The American Association of Medical Assistants (AAMA) offers the CMA (Certified Medical Assistant) examination. The CMA is a national certification.
- The American Medical Technologist (AMT) offers the RMA (Registered Medical Assistant) examination. The RMA credential is an international certification.

Program Completion Limits:

All educational experiences are under the guidance of the Medical Assistant program. Student progress is evaluated in the classroom, laboratory and clinical setting throughout the program. Progression in the program is based upon the student meeting the following requirements:

1. Adherence to the program requirements outlined in the Medical Assistant Student Handbook.
2. Achievement of a minimum grade of B- or better in all MOA and a C or better in required support courses.
3. All MOA courses taken at HFC must be successfully completed within three consecutive calendar years. The Medical Assisting program continuously updates its program of study to meet changing health care needs and the requirements of the accreditation agency and clinical affiliates; thus the College reserves the right to change policies at any time.

Transfer Agreements:

Learn More About: Transfer Opportunities

Programs

MASST.CA - Medical Assistant
MEDBILLCODEMGMT.AAS - Medical Billing and Coding Management
MEDBILLINGCODING.CA - Medical Billing and Coding
MPCM.AAS - Medical Practice Clinical Management

Courses

HIT150 - Basic Coding: Theory and Practice
HIT151 - Basic Medical Coding: Theory & Practice
HIT230 - Ambulatory Coding
MOA101 - Administrative Medical Procedures I
MOA110 - Processing Health Insurance Claims
MOA122 - Intro to Medical Assistant Clinical Proc
MOA152 - Medical Assistant Clinical Procedure II
MOA165 - Physician Billing Concepts
MOA168 - Facility Billing Concepts
MOA170 - Med Correspond - Electronic Hlth Record
MOA181 - Medical Collection and Legal Issues
MOA190 - Medical Office Externship
MOA205 - Insurance Coding & Reimbursement

Meterorological Science Department

Learn More About: Transfer Opportunities

Courses

ATMS131 - Weather and Climate

Music Department

Explore: Recording Arts | Henry Ford College

Career Opportunities - Recording Arts Certificate Program:

- Studio recording engineer
- Studio recording technician
- Studio mixing engineer
- Studio assistant engineer/technician
- Studio producer

Registry / Certification / Licensure Exam Information - Recording Arts Certificate Program:

As part of the curriculum for MUS-192 and MUS-292 Students will have the opportunity to take Avid Pro Tools Certification Exams to become Avid Pro Tools Certified. Exams must be proctored by an Avid Certified Instructor from an Avid Learning Partner such as Henry Ford College. The cost of exams are included in the cost of required textbooks for the courses. Exams are optional and are not part of the program's requirements.

Career Opportunities - Music Associate in Arts Program:

- Church music director
- Community music director
- Freelance musician
- Music retail
- Private music instructor

Transfer Agreements:

Learn More About: Transfer Opportunities

Programs

MUSIC.AA - Music
RECORDINGARTS.CA - Recording Arts

Courses

MUS107 - Chorus 1
MUS108 - Chorus 2
MUS109 - Symphony Band 1
MUS110 - Symphony Band 2
MUS111 - Jazz Band 1
MUS112 - Jazz Band 2
MUS113 - Applied Music (1 Credit) 1
MUS114 - Applied Music (2 Credits)1
MUS115 - Applied Music (1 Credit) 2
MUS116 - Applied Music (2 Credits) 2
MUS117 - Piano Class 1
MUS118 - Piano Class 2
MUS121 - Jazz Improvisation 1
MUS122 - Jazz Improvisation 2
MUS123 - Voice Techniques 1
MUS126 - Recording Studio Engineering 1
MUS127 - Audio Mastering 1
MUS128 - Musical Production 1
MUS130 - Music Appreciation
MUS132 - Music Literature
MUS133 - Exploring Popular Music
MUS134 - Music Fundamentals
MUS138 - Music Theory 1
MUS139 - Music Theory 2
MUS141 - Aural Music Skills 1
MUS142 - Aural Music Skills 2
MUS143 - Vocal Jazz Ensemble 1
MUS144 - Vocal Jazz Ensemble 2
MUS152 - Music Notation With Finale 1
MUS154 - Arab Music Appreciation
MUS156 - Music Technology
MUS157 - Applied Music (live Sound Rein & Record)
MUS191 - Audio Recording Technology 1
MUS192 - Pro Tools 101
MUS207 - Chorus 3
MUS208 - Chorus 4
MUS209 - Symphony Band 3
MUS210 - Symphony Band 4
MUS211 - Jazz Band 3
MUS212 - Jazz Band 4
MUS213 - Applied Music (one Credit) 3
MUS214 - Applied Music (two Credits) 3
MUS215 - Applied Music (one Credit) 4
MUS216 - Applied Music (two Credits) 4
MUS221 - Jazz Improvisation 3
MUS222 - Jazz Improvisation 4
MUS226 - Recording Studio Engineering 2
MUS227 - Audio Mastering 2
MUS228 - Musical Production 2
MUS229 - Advanced Studies in Audio Recording
MUS232 - History of Western Music 1
MUS233 - History of Western Music 2
MUS238 - Music Theory 3
MUS243 - Vocal Jazz Ensemble 3
MUS244 - Vocal Jazz Ensemble 4
MUS291 - Audio Recording Technology 2
MUS292 - Pro Tools 110
MUS299 - Recording Arts Capstone

Nursing Department

Career Opportunities:

Graduates can seek full-time employment upon passing the National Council Licensure Exam for Registered Nurses (NCLEX-RN). Opportunities for employment in nursing exist in hospitals, clinics, home care, factories, military services, schools, public health, and education settings. The Bureau of Labor Statistics predicts that employment in nursing will grow 12% between the years of 2018 and 2028. Many more opportunities in nursing are available with advanced education and experience.

Occupational Exposure/Risk:

Students in the nursing program must understand that they will be involved in the direct care of clients, including direct contact with all parts of the body. Because nurses are required to lift, move and transfer patients, stand for long periods of time, possess certain fine motor skills and sufficient visual acuity to care for patients, additional physical capabilities are required for entrance into the program. In order to be considered for admission to or retention in the Nursing Program, students must possess:

- Sufficient visual acuity necessary for accurate assessment and safe nursing care to clients, such as, physical assessment, preparation and administration of all medications and direct observation of clients.

- Sufficient auditory perception to receive verbal communication from clients and members of the health team and to assess client health status while using equipment and interpreting other noise stimuli (cardiac monitors, stethoscopes, intravenous infusion pumps, dopplers, fire alarms, call lights and cries for help).
- Sufficient gross/fine motor coordination to respond promptly and implement skills required in meeting health care needs of clients, including manipulation of equipment and supplies.
- Sufficient physical abilities to move around client's rooms, work in treatment areas and administer cardiopulmonary procedures.
- Sufficient strength to perform physical activities frequently requiring the ability to lift, push, pull objects more than fifty pounds and transfer objects and persons of more than one hundred pounds.
- Sufficient communication skills (speech, reading, writing) to interact with clients and communicate their health status and needs promptly and effectively.
- Sufficient intellectual and emotional capability to plan and implement care for clients.
- Sufficient psychological stability essential to perform at the required levels in the clinical portions of the nursing program.
- Ability to sustain long periods of concentration to make decisions regarding correct techniques, use of equipment, and proper care of clients.
- Sufficient physical stamina to remain standing for long periods of time.

Applicants considering a career in nursing may also be exposed to infectious diseases during their course of study and in subsequent employment in the field and are likely to work in situations where exposure to infectious disease is possible. This is an occupational health risk for all health care workers. Persons should not become health care workers unless they recognize and accept this risk. Proper education and strict adherence to well established infection-control guidelines can reduce this risk to a minimum. Thorough education in infection control procedures is an important part of the nursing program of study.

Registry / Certification / Licensure Exam Information:

The nursing program prepares graduates for entry-level positions in the nursing profession.

Successful completion of the program of study qualifies graduates to receive an Associate in Applied Science Degree and apply to take the National Council Licensure Examination for Registered Nurses (NCLEX-RN) leading to state license as a registered nurse.

The Michigan State Board of Nursing regulates the licensing and can deny RN licensure for a number of reasons; for example, conviction of a misdemeanor or a felony. Prior to beginning the Nursing program, students are advised to visit the Michigan website or call the Michigan Board of Nursing regarding eligibility for licensing.

Henry Ford College's nursing program prepares you to take the NCLEX exam in the state of Michigan. Graduates who want to practice in other states should review those requirements via that Board of Nursing. For additional information, please contact the National Council of State Boards of Nursing.

Program Completion Limits:

The College and the Nursing Faculty reserve the right to make policy and program changes at any time to comply with requirements of accrediting agencies, clinical facilities, or the college, and to meet the changing health care needs of society. Requirement changes, updates, and all information regarding the Nursing program can be obtained through the Nursing Student Success Navigator located in the Welcome Center Advising area on main campus.

Transfer Agreements:

- Bachelor Science in Health Services Administration, Medical Case Management, OR Nursing 2+2 agreement with **Davenport University**
- Bachelor of Science in Nursing 3+1 agreement with **Eastern Michigan University**
- Bachelor of Science in Nursing 3+1 agreement with **Michigan State University**
- Bachelor of Science in Nursing 3+1 agreement with **Olivet College**
- Bachelor of Science in Nursing 2+2 agreement with **Oakland University**
- Bachelor of Science in Nursing 3+1 agreement with **University of Michigan - Flint**

Learn More About: Transfer Opportunities

Programs

NURSE.AAS - Nursing
PRENURSING - Pre-Nursing

Courses

NCS112 - Competency Evaluated NursingAssis(CENA)
NSG101 - Beginning Health & Physical Assessment
NSG116 - Pharmacology for Nursing Practice
NSG117 - Medical-Surgical Nursing I
NSG119 - Medical-Surgical Nursing II
NSG121 - Psychiatric Mental Health Nursing
NSG202 - Medical-Surgical Nursing III
NSG209 - Medical-Surgical Nursing IV
NSG212 - Professional Transitions
NSG217 - Pediatric Nursing
NSG218 - Women's Health & Maternity Care
NSG285 - Pathophysiology for Nurses

Ophthalmic Technician Department

Career Opportunities:

The Profession:

Ophthalmic Technicians are health professionals who are an integral part of the team of medical practitioners providing vision care. They perform administrative and clinical functions under the direction of medical or osteopathic physicians who provide comprehensive, refractive, medical, and surgical eye care to the public. Technicians provide administrative support services by coordinating clinic schedules, charting, coding, and transmitting orders of the physician. Clinical functions may be generalized or specialized. Duties may include calibrating and maintaining ophthalmic equipment and supplies, recording medical histories and vision, testing eye movements and binocular functions, measuring optical power and visual fields, assisting in minor and major eye surgery, and performing ocular imaging and biometry services as applicable by local law.

Ophthalmic technicians are employed primarily by ophthalmologists, medical institutions, clinics, hospitals, ambulatory surgery centers, university ophthalmology centers, or physician groups in which they may be assigned to an ophthalmologist responsible for their supervision and performance. They may be involved with the patients of an ophthalmologist in any setting for which the ophthalmologist is responsible.

Demand for ophthalmic medical technicians should remain strong due to the rising population of older persons, the segment of the population with increased frequency of chronic health conditions.

Occupational Exposure/Risk:

Applicants considering a career as an Ophthalmic Technician should be aware that during their course of study and in subsequent employment in the field, they are likely to work in situations where exposure to infectious disease is possible. This is an occupational risk for all health care workers. Persons should not become health care workers unless they recognize and accept this risk. Proper education and strict adherence to well established infection control guidelines can reduce the risk to a minimum. Thorough education in infection control procedures is an important part of the Ophthalmic Technician program.

Latex Allergies:

Early recognition of sensitization to natural rubber latex (NRL) is crucial to prevent the occurrence of life-threatening reactions in sensitized healthcare workers. The program faculty strongly advises that students sensitized or allergic to latex consult with a physician for guidance on the merits of continuing in a health care career. NRL sensitized students who choose to continue in Ophthalmic Technician program must notify the program director.

Program Completion Limits:

The Ophthalmic Technician AAS Degree (OPT) program is 23 months in length. Students must complete all OPT courses within three years of beginning the formal program. All courses in the OPT program must be completed with a C or better. Students are responsible for their own transportation to clinical sites and any expenses incurred.

The College continuously attempts to improve each program and as a result, courses and requirements may be modified. Curriculum, course content, and admission criteria are subject to change by action of the College faculty and administration. Contact the Health Careers Office at (313) 845-9877 for any current program updates or visit www. hfcc.edu.

Withdrawal and Readmission:

A students who fails one or both first semester OPT courses (OPT101 Intro to Ophthalmic Technology/OPT134 Ocular Anatomy and Pathology) must stop out of the program. Sequencing for OPT course work is not optional; courses are scheduled annually. Therefore, all students who fail a course must appeal for continuance with a remediation plan in writing. If a student fails a course on second attempt, they are out of the ophthalmic technician program.

Transfer Agreements:

Learn More About: Transfer Opportunities

Programs

OPTECH.AAS - Ophthalmic Technician
PREOPHTHALMICTECH - Pre-Ophthalmic Technician

Courses

OPT101 - Introduction to Ophthalmic Technology
OPT134 - Ocular Anatomy and Pathology
OPT150 - Applied Ophthalmic Optics
OPT160 - Ocular Measurements I
OPT161 - Ocular Measurements
OPT180 - Ocular Measurements II
OPT200 - Clinical Optical Procedures
OPT202 - Optical Clinical Procedures
OPT220 - Ophthalmic Photography
OPT240 - Ophthalmic Surgical Assisting
OPT250 - Ophthalmic Surgical Assisting Curr Issue
OPT260 - Current Issues in Vision Care
OPT290 - Clinical Externship I
OPT293 - Clinical Externship II
OPT295 - Ophthalmic Externship III
OPT297 - Clinical Externship III

Paralegal Department

Career Opportunities - Paralegal Certificate Program:

Employment in a law office, in government, or in the private sector.

Transfer Agreements:

- Bachelor Degree (Many Programs) other agreement with **Davenport University**
- Bachelor of Science in Paralegal 2+2 agreement with **Eastern Michigan University**

Learn More About: Transfer Opportunities

Programs

PARALEGAL.AB - Paralegal Studies
PARALEGAL.CA - Paralegal Studies

Courses

LGL100 - Essential Paralegal Skills
LGL110 - Legal Ethics
LGL115 - Property Law
LGL126 - Legal Research
LGL190 - Co-Op in Paralegal Studies
LGL200 - Civil Litigation
LGL220 - Personal Injury Litigation
LGL226 - Legal Writing
LGL228 - Technology in the Law
LGL235 - Contracts
LGL240 - Family Law
LGL245 - Estate Planning and Probate
LGL248 - Immigration Basics
LGL250 - Business Organizations
LGL290 - Co-Op in Paralegal Studies
LGL295 - Paralegal Internship
LGL299 - Special Topics in Law

Philosophy Department

Learn More About: Transfer Opportunities

Courses

PHIL130 - Introduction to Philosophy
PHIL131 - Introduction to Logic
PHIL133 - History of Philosophy to 18th Century
PHIL135 - History of Modern Philosophy
PHIL137 - Topics in Philosophy
PHIL138 - Moral Issues in Biotechnology
PHIL139 - Ethics
PHIL201 - Eastern Philosophy

Physical Science Department

Learn More About: Transfer Opportunities

Courses

PSCI131 - Introduction to Physical Science
PSCI135 - Sound & Light in Fine-Arts

Physical Therapy Assistant Department

Career Opportunities:

The Profession:

Physical Therapist Assistants (PTAs) are skilled health care providers who assist in providing planned patient care under the direction and supervision of a Physical Therapist. As members of the rehabilitation team, PTAs perform treatments designed to relieve pain, promote healing, and improve functional ability. Once a treatment plan is designed by a physical therapist, the PTA may be responsible for carrying out this treatment plan.

Opportunities:

Opportunities for PTAs are excellent at this time and are projected to increase through at least the year 2034. PTAs may choose to practice in a variety of settings including hospitals, rehab centers, sports medicine clinics, public and private schools, outpatient physical therapy clinics, nursing homes, and home health settings. Information about career placement and job success is available through either the Health Careers Office or the Career Services Office.

Occupational Exposure/Risk:

In physical therapy, both in school and on the job, exposure to infectious diseases may be minimal to moderate depending on the work setting. This is an occupational risk. Proper education and strict adherence to well established infection control guidelines, can further reduce the risk. Thorough education in infection control procedures is a part of the physical therapist assistant program of study.

Latex Allergies:

Early recognition of sensitization to natural rubber latex (NRL) is crucial to prevent the possible occurrence of life-threatening reactions in sensitized healthcare workers. The program faculty strongly advise that students sensitized or allergic to latex consult a physician for guidance on the merits of continuing in a health care career. NRL sensitized students who choose to continue in the physical therapist assistant program are to notify the program director.

Other Information:

The information represented here is for the current catalog year, if you were admitted prior to this year, please check your requirements under the Program Evaluation section of WebAdvisor.

The College continuously attempts to improve each program and as a result, courses and/or requirements may be modified. Curriculum, course content, and admission criteria are subject to change by action of the College faculty and administration.

PTA Program Complaint and Compliment Policy:

The Henry Ford College Physical Therapy Assistant AAS Degree Program wishes to be responsive to any substantive complaints or compliments regarding the program, its students, faculty, or graduates.

- Complaints or compliments about the program students should be given in writing to the PTA Program Director, Stephen Pedley (sepedley@hfcc.edu).
- Complaints or compliments about program faculty should be given in writing to the School of Health and Human Services Associate Dean, Cynthia Scheuer (cscheuer@hfcc.edu).
- Complaints about PTA program graduates should be directed to the Michigan Board of Physical Therapy; LARA-Physical Therapy

Registry / Certification / Licensure Exam Information:

Successful passage of the PTA Licensure Exam is required to practice in the State of Michigan. Students who are graduates of this program do qualify to sit for the National Physical Therapist Assistant Examination. Further details regarding this exam will be given as the student nears graduation.

Transfer Agreements:

- Bachelor of Science in Exercise Science 2+2 agreement with **Eastern Michigan University**

Learn More About: Transfer Opportunities

Programs

PREPHYSTHERAPYASST - Pre-Physical Therapist Assistant
PTAST.AAS - Physical Therapist Assistant

Courses

PTA102 - Introduction Physical Therapy Practice

PTA110 - Therapeutic Techniques for PTA I

PTA118 - Exercise Techniques I
PTA122 - Exercise Techniques Lab
PTA132 - Kinesiology for PTA's
PTA144 - Physical Therapy Modalities
PTA168 - Developmen Across the Lifespan for PTAs
PTA225 - Applied Pathology for PTAs
PTA250 - Extremity Orthopedics
PTA254 - Spinal Orthopedics
PTA262 - Rehabilitation of Neurological Cond 1
PTA265 - Rehab of Neurological Conditions Lab
PTA272 - Professional Issues in Physical Therapy
PTA291 - Clinical Externship 1
PTA295 - Clinical Externship II

Physics Department

Learn More About: Transfer Opportunities

Courses

PHYS131 - General Physics I
PHYS132 - General Physics II
PHYS133 - Principles of Physics
PHYS231 - Engineering Physics I
PHYS232 - Engineering Physics II

Political Science Department

Learn More About: Transfer Opportunities

Courses

POLS101 - Am Gov:Democrat Partic Civic Engagement
POLS131 - Intro to American Gov't & Politi Science
POLS135 - American Legal System & Process
POLS150 - Leadership, Organizing & Public Service
POLS152 - International Relations
POLS155 - State & Local Government
POLS200 - Introduction to Peace and Conflict
POLS201 - Public Policy: Topics & Analysis
POLS202 - Foreign Policy: Topics & Analysis

Pre-Education Department

Career Opportunities - Pre Elementary Education Associate in Arts Program:

Pre-Elementary Education program graduates may seek employment in child development centers. They are also able to work as an au pair, tutors, para-professionals, assistant pre-school teachers, and before/after school program group leaders in a variety of educational settings. For those wishing to teach in PK-6 schools, completion of a four-year teacher preparation program with teacher certification is necessary.

This degree requires coursework that can be transferred to most four-year teacher preparation programs without loss of credit. The elective component of this program allows students to select courses that apply toward the bachelor's degree at their intended transfer institution. Students are encouraged to consult the university guide sheets in the University Transfer, Advising, and Career Counseling Center located in Learning Resources Center.

Career Opportunities - Pre Secondary Education Associate in Arts Program:

Pre-Secondary Education program graduates who complete a bachelor degree with teacher certification may teach in middle schools or high schools.

This degree requires course work that can be transferred to most four-year teacher preparation programs without loss of credit. The elective component of this program allows students to select courses that apply toward the bachelor's degree at their intended transfer institution. Students are encouraged to consult the university guide sheets in the University Transfer, Advising, and Career Counseling Center located in Learning Resources Center.

Transfer Agreements:

HFC Pre-Elementary Education - Associate of Arts

- Bachelor of Arts in Elementary Education 2+2 agreement with **University of Michigan - Dearborn**
- Bachelor of Science in Elementary - Early Childhood Teaching and Learning with Certification 2+2 agreement with **Eastern Michigan University**

Learn More About: Transfer Opportunities

Programs

EDPAR.CA - Education Paraprofessional
PELED.AA - Pre-Elementary Education
PSCED.AA - Pre-Secondary Education

Courses

EDU250 - Humanities & Performing Arts Educators
EDU256 - Educational Psychology
EDU260 - History in Elementary Schools
EDU295 - Exceptional Children in Early Childhood
EDU296 - Exceptional Child
EDU298 - Foundations of Educ With Pract Exp

Pre-Engineering Department

Career Opportunities - Engineering Technology - Mechanical Associate in Applied Science Program:

- Mechanical Engineering Technician
- Mechanical Service Technician
- Mechanical Assembly Technician
- Mechanical Trades Technician

Career Opportunities - Engineering Technology Pathway Mechanical/Electrical Associate in Science Program:

After completion of this program and transfer to and completion of the 4-year institution Bachelor of Science degree, students can specialize in fields such as Mechanical or Electrical Engineering Technology.

Career Opportunities - Engineering Technology Construction Management Associate in Applied Science Program:

- Architectural CAD Technician
- Construction Services Technician
- Construction Engineering Technician
- Residential Maintenance Technician
- Design Technician

Explore: Pre-Engineering | Henry Ford College

Career Opportunities - Pre-Engineering: General - Associate in Science Program:

After completion of program and transfer to a 4-year institution, engineering students can specialize in fields such as:

- Aerospace
- Biomedical
- Chemical
- Computer and electrical
- Industrial

- Mechanical
- Civil, including structural, transportation, environmental, geotechnical, urban planning, and water resources.

Transfer Agreements:

HFC Pre-Engineering: General - Associate of Science

- Bachelor of Science in Electrical & Computer Engineering 2+2 agreement with **Eastern Michigan University**
- Bachelor of Science in Electrical Engineering 2+2 agreement with **Wayne State University**
- Bachelor of Science in Mechanical Engineering 2+2 agreement with **Eastern Michigan University**
- Bachelor of Science in Mechanical Engineering 2+2 agreement with **Wayne State University**

HFC Pre-Engineering: Electrical / Computer - Associate of Applied Science

- Bachelor of Science in Electrical & Computer Engineering 2+2 agreement with **Eastern Michigan University**
- Bachelor of Science in Computer Engineering 2+2 agreement with the **University of Michigan - Dearborn**
- Bachelor of Science Electrical Engineering 2+2 agreement with the **University of Michigan - Dearborn**
- Bachelor of Science Robotics Engineering 2+2 agreement with the **University of Michigan - Dearborn**
- Bachelor of Science Electrical Engineering 2+2 agreement with **Wayne State University**

HFC Pre-Engineering: Mechanical / Industrial - Associate of Applied Science

- Bachelor of Science in Mechanical Engineering 2+2 agreement with **Eastern Michigan University**
- Bachelor of Science in Mechanical Engineering 2+2 agreement with the **University of Michigan - Dearborn**
- Bachelor of Science in Industrial Systems Engineering 2+2 agreement with the **University of Michigan - Dearborn**
- Bachelor of Science in Manufacturing Engineering 2+2 agreement with the **University of Michigan - Dearborn**
- Bachelor of Science in Bioengineering 2+2 agreement with the **University of Michigan - Dearborn**
- Bachelor of Science in Mechanical Engineering 2+2 agreement with **Wayne State University**

Learn More About: Transfer Opportunities

Programs

BASICENGMECH.CA - Basic Engineering: Mechanical
EGR.CONSTRUCTION.AAS - Engineering Technology- Construction Management
EGR.MECHANICAL.AAS - Engineering Technology - Mechanical
ENGIN.AS - Pre-Engineering: General
ENGPTH.MECHELEC.AS - Engineering Technology Pathway: Mechanical/Electrical
PREENGINELECCOMP.AAS - Pre-Engineering: Electrical/Computer
PREENGINMECHIND.AAS - Pre-Engineering: Mechanical/Industrial

Courses

ENGR121 - Engineering Design and 3D Printing
ENGR125 - Introduction Computation for Engineers
ENGR130 - Introduction to Engineering
ENGR201 - Science of Materials
ENGR232 - Statics
ENGR235 - Mechanics of Materials
ENGR240 - Circuits
ENGT245 - Applied Statics
ENGT265 - Mechanical Capstone Project
ENGT290 - Co-Op in Engineering Technology

Psychology Department

Learn More About: Transfer Opportunities

Courses

PSY131 - Introductory Psychology
PSY152 - Child Psychology
PSY251 - Abnormal Psychology
PSY253 - Lifespan Development
PSY254 - Social Psychology
PSY257 - Health Psychology

Public Health Department

Transfer Agreements:

- Bachelor of Science in Public Health 2+2 agreement with **Western Michigan University**
- Bachelor of Science in Health and Human Service - Public Health 2+2 agreement with **University of Michigan Dearborn**

Learn More About: Transfer Opportunities

Programs

PUBLICHEALTH.AS - Public Health

Radiographer Technologist Department

Career Opportunities:

The Profession:

Radiologic Technology is a segment of medicine devoted to patient diagnosis through the use of ionizing radiation. Specifically, radiation is used to create images of tissues, organs, bones, and vessels that comprise the human body. When requested by a physician, it is the radiographer who is responsible for creating these images in a safe and precise manner. The radiologist, a physician who is specifically trained in the interpretation of these images, performs diagnosis of the final image.

A major responsibility of the radiographer lies in the proper use of radiation. When not properly utilized, ionizing radiation has the potential to be damaging to both patient and user. Therefore, the radiographer is trained to understand radiation and be aware of its potential hazards. This knowledge serves to protect the patient and the radiographer, creating a safe work environment

Opportunities:

The job market for radiographers in southeastern Michigan is becoming increasingly more competitive. Information regarding employment trends for radiographers in Michigan is available through the HFC Placement Office (313) 845-9618.

A representative job profile for radiographer can be obtained through the Health Careers Office. Students requiring accommodation should directly contact the Assisted Learning Services at (313) 845-9617.

Occupational Exposure/Risk:

In Radiologic Technology, both in school and on the job, frequent exposure to radiation, sharps, patient secretions, bodily wastes, infectious patients, electricity, equipment noise, and latex is possible. These are occupational risks. Proper education in all areas and strict adherence to well established infection control guidelines can reduce the risk to a minimum. Thorough education in all areas, including infection control procedures, is an important part of the radiographer program.

Latex Allergy:

Early recognition of sensitization to natural rubber latex (NRL) is crucial to prevent the possible occurrence of life-threatening reactions in sensitized healthcare workers. The program faculty strongly advise that students sensitized or allergic to latex consult a physician for guidance on the merits of continuing in a health care career. NRL sensitized students who choose to continue in the radiographer program are to notify the program director.

Registry / Certification / Licensure Exam Information:

Students who intend to take the American Registry of Radiologic Technology Certification Examination are required to meet all general and ethical qualifications of the ARRT. A list of qualifications is included in the student handbook. Conviction of a crime may prevent a student from taking this examination. This material is also available upon request by calling the ARRT at (651) 687-0048 or online at www.arrt.org.

Program Completion Limits:

HFC continuously attempts to improve each program, and as a result courses and requirements may be modified. Curriculum, course content, and admission criteria are subject to change by action of the College faculty and administration.

Graduation:

In order to graduate from the Radiographer Program, students must meet all academic and clinical requirements.
Graduates of the Radiographer program will be awarded an Associate in Applied Science Degree. Graduates who intend to take the American Registry of Radiologic Technologists (ARRT) certification examination are required to meet all general and ethical qualifications of the ARRT.

A list of qualifications is available upon request at ARRT (651) 687-0048 or at www.arrt.org.

Health Care Coverage:

It is the student's responsibility to have health care coverage in place during the entire program. Hospitalization insurance can be purchased through the College.

Clinical Assignments:

Clinical rotations begin during the first semester and continue throughout the entire program. Clinical hours are generally 8:00 a.m. to 4:30 p.m. with specific days of assignment changing from semester to semester. Beginning in the 3rd semester of the program, students perform afternoon shift clinical rotations.

Transfer Agreements:

- Bachelor Degree (Many Programs) other agreement with **Davenport University**

Learn More About: Transfer Opportunities

Programs

PRERADIOGRAPHER - Pre-Radiographer
RADTC.AAS - Radiographer

Courses

RAD109 - Clinical Education I
RAD111 - Principles of Radiation Protection
RAD114 - Introduction to Radiology & Patient Care
RAD118 - Radiographic Positioning
RAD158 - Radiographic Positioning II
RAD161 - Imaging Equipment
RAD171 - Principles of Exposure
RAD181 - Fluoroscopy Studies
RAD190 - Clinical Education II
RAD196 - Clinical Education Level 3
RAD209 - Intermediate Clinical Education
RAD214 - Pathology and Cross Sectional Anatomy
RAD228 - Radiographic Procedures
RAD267 - Radiation Physics
RAD271 - Digital Image Acquisition and Management
RAD274 - Principles of Radiation Biology
RAD284 - Principles of Computed Tomography
RAD286 - Registry Review
RAD290 - Advanced Clinical Education
RAD296 - Capstone Clinical Education

Religious Studies Department

Learn More About: Transfer Opportunities

Courses

WR130 - Introduction to Study of World Religions
WR131 - Religious Traditions in the World
WR232 - West Religion: Christian, Judaism, Islam
WR233 - Eastern Religions
WR235 - Christianity - The First 1000 Years
WR236 - African American Religious Exp/Expressi
WR240 - Myths & Symbols:Deciphering Sacred Trad
WR241 - Islam
WR280 - Topics in Religious Studies

Respiratory Therapy Department

Career Opportunities:

The Profession:

Respiratory therapists are health care professionals, dedicated to providing life-supporting, life- enhancing care to newborns, children, adults and the elderly. Respiratory therapists work under qualified medical direction to assess, treat, manage, provide diagnostic evaluation, educate, and care for patients with deficiencies and abnormalities associated with the cardiopulmonary system. Therapists work throughout hospitals, most often in intensive care units and emergency settings. Therapists are a special blend of patient-centered caregivers and technically sharp, analytical thinkers. Some therapists concentrate on pulmonary rehabilitation and continuing care in patient homes or extended care facilities while others specialize in pediatric/neonatal care. The respiratory therapist may also work in areas such as cardiopulmonary diagnostics, medical equipment sales, management, and education.

Opportunities:

The outlook for RTs has never been better. According to the Bureau of Labor Statistics, employment is expected to increase faster than average through the year 2022. The American Association for Respiratory Care (AARC) offers a wide variety of information on a career in Respiratory Therapy at www.aarc.org.

Occupational Exposure/Risk:

Applicants considering a career in Respiratory Therapy should be aware that during their course of study and in subsequent employment in the field, they are likely to work in situations where exposure to infectious disease is possible. This is an occupational risk for all health care workers. Persons should not become health care workers unless they recognize and accept this risk. Proper education and strict adherence to well established infection-control guidelines, can reduce the risk to a minimum. Thorough education in infection control procedures is an important part of the respiratory therapist program of study.

Latex Allergies:

Early recognition of sensitization to natural rubber latex (NRL) is crucial to prevent the occurrence of life-threatening reactions in sensitized healthcare workers. The program faculty strongly advises that students sensitized or allergic to latex consult a physician for guidance on the merits of continuing in a health care career. NRL sensitized students who choose to continue in the Respiratory Therapist program must notify the program director.

Registry / Certification / Licensure Exam Information:

Successful completion of the program of study qualifies graduates to receive an Associate of Applied Science degree, become eligible to sit for the national accreditation exams for the designation of the Registered Respiratory Therapist (RRT) and apply for state licensure as a respiratory therapist. The national examinations consist of the Therapist Multiple-Choice Examination (TCM) and the Clinical Simulation Examination offered by the National Board of Respiratory Care (NBRC). Information on the exam process is available through the NBRC at www.nbrc.org.

Program Completion Limits:

Program is twenty-one months in length. Students must complete all RTH courses within three years of beginning the formal program. Each Respiratory Therapist course may be repeated only once.

The College continuously attempts to improve each program and as a result, courses and/or requirements may be modified. Curriculum, course content, and admission criteria are subject to change by action of the College faculty and administration. Contact the Health Careers Office for any current program updates or visit www.hfcc.edu for any current updates.

Transfer Agreements:

- Bachelor Degree (Many Programs) other agreement with **Davenport University**
- Bachelor of Science in Exercise Science 2+2 agreement with **Eastern Michigan University**

Learn More About: Transfer Opportunities

Programs

PRERESPTHERAPY - Pre-Respiratory Therapist
RESTH.AAS - Respiratory Therapist

Courses

RTH100 - Principles of Respiratory Care
RTH130 - Therapeutic Procedures
RTH160 - Respiratory Therapy Pharmacology
RTH170 - Therapeutic Procedures II

RTH180 - RT Clinical Sciences
RTH195 - Introduction to Clinical Therapeutics
RTH210 - Ventilator Management 1
RTH220 - Respiratory Care Neonates & Pediatrics
RTH240 - Cardiopulmonary Diagnostics
RTH250 - Advanced Mechanical Ventilation
RTH270 - Therapeutic Clinical Management
RTH285 - Advanced Respiratory Concepts
RTH288 - Intermediate Clinical Therapies
RTH295 - Clinical Therapeutics Practicum
RTH298 - Advanced Clinical Therapeutics Practicum

School of BEPD Department

School of HHS Department

School of Liberal Arts Department

School of STEM Department

Science Education Department

Career Opportunities - Science Associate in Science Program:

The nature of this program is to serve as a transfer degree into a 4-year or longer degree at another college or university.

Transfer Agreements:

- Bachelor of Social Work 2+2 agreement with **Wayne State University**

Learn More About: Transfer Opportunities

Programs

SCIENCE.AS - Science

Courses

SCI212 - Earth Science for Educators
SCI213 - Learning By Inquiry: Life Science
SCO190 - Co-op in Science
SCO290 - Co-op in Science

Skilled Trade & Apprenticeship Department

Learn More About: Transfer Opportunities

Programs

INDUSELEC.TA.CA - Industrial Electrician
INSTRU.TA.CA - Instrumentation Technician
MACREP.TA.CA - Machine Repair
MECHATRONICSTECH.AAS - Mechatronics Technology
MILLWR.TA.CA - Millwright
PLMTT.AAS - Plant Maintenance Trades
PLUPIP.TA.CA - Plumbing/ Pipefitting
TDIMAK.TA.CA - Tool and Die Maker
TOOLMA.TA.CA - Tool Maker

Courses

TADV060 - Basic Skills for the Skilled Trades
TADV100 - Basic Print Reading
TADV125 - Intro to Integrated Manufacturing
TADV181 - Topics in Skilled Trades
TADV182 - Special Topics in Skilled Trades
TADV283 - Advanced Topics in Skilled Trades
TAEL103 - DC and AC Electricity
TAEL105 - AC Theory and Equipment
TAEL106 - Electronics Theory
TAEL115 - Digital Theory
TAEL145 - DC and AC Motors
TAEL200 - Ladder Diagrams & Motor Controls
TAEL235 - Siemens PLC/HMI Programming
TAEL245 - Programmable Logic Controllers (plc)
TAEL260 - Automation Controls and Robotics
TAEL265 - National Electrical Code
TAEL273 - Fire Alarm Systems for Electricians
TAEL275 - Residential Wiring
TAEL276 - Commercial Wiring
TAEL277 - Industrial Wiring
TAEL280 - Low Voltage & Communication Wiring
TAEL290 - High Voltage Power Distribution
TAEL291 - Elec Power Distribution & Transmission
TAFD117 - Industrial Computer Applications
TAFD120 - Industrial Safety Awareness
TAFD126 - Proc Industry Health, Environ & Safety
TAFD130 - Industrial Applications Physical Science
TAFD150 - Applied Technology
TAFD295 - Industrial Maintenance Externship
TAFP150 - Introduction to Industrial Hydraulics
TAFP160 - Pneumatic Power and Control
TAFP270 - Fluid Pow Sys:CircuitDesign&Troublesho
TAFP280 - Applied Electrohydraulics
TAGD110 - Basic Shape and Size Interpretation
TAGD120 - Advanced Graphic Interpretation
TAGD130 - Assembly Detailing
TAGD140 - Compound Angles and Advanced Projection
TAGD150 - Tool, Jig, and Fixture Design
TAGD155 - Gage, Cam Layout and Fixture
TAGD160 - Press Working Fundamentals
TAGD165 - Cutting and Forming Dies
TAGD171 - Descriptive Geometry: Lines and Planes
TAGD172 - Descriptive Geom: Planes, Solids & Dev
TAGD280 - Panel Tipping
TAMA110 - Industrial Applications Basic Math Princ
TAMA120 - Industrial Applications Algebraic Princi
TAMA130 - Industrial Appl of Geometric Principles
TAMA200 - Industrial Appl of Trigonomic Principles
TAMN100 - Shop Tools and Techniques
TAMN120 - Machine Tool Applications
TAMN130 - Advanced Manufacturing Processes
TAMT110 - Mechanical Power Transmission
TAMT115 - Maintenance Trades Print Reading
TAMT123 - Maint Print Read: Struct Steel & Convey
TAMT126 - Maintenance Print Reading: Plant Layout
TAMT200 - Predictive Maintenance Shaft Align & Cou
TAMT210 - Predictive Maintenanc Vibration Analysis
TAMT220 - Advanced Rigging
TAMT260 - Gearing
TAPI105 - Intro to Industrial & Pneumatic Controls
TAPI120 - Instrumentation: Print Reading
TAPP100 - Fundamentals of Plumbing & Pipefitting
TAPP110 - Drains, Wastes, and Vents
TAPP120 - Heating Systems
TAPP250 - Plumbing Code
TAPT100 - Introduc to Process Technology Practices
TAPT110 - Process Technology Equipment
TAPT120 - Introduction to Process Instrumentation
TAPT125 - Process Technology Instrumentation II
TAPT130 - Process Technology Systems
TAPT140 - Process Technology Quality
TASM100 - Basic Sheet Metal Layout & Fabrication
TASM120 - Sheet Metal Layout: Radial & Triangular
TASM130 - Sheet Metal Layout: Appl Triangulation

Social Work Department

Transfer Agreements

Social Work and Counseling - Associate of Arts:
Bachelor of Social Work 2+2 agreement with **Eastern Michigan University**
Bachelor of Social Work 2+2 agreement with **Oakland University**
Bachelor of Social Work 2+2 agreement with **Wayne State University**

Related Area(s):
Bachelor of Science in Health and Human Service - Human Services 2+2 agreement with **University of Michigan - Dearborn**

Learn More About: Transfer Opportunities

Programs

SOCWRKCOUNS.AA - Social Work and Counseling

Courses

HHS100 - Introduction to Social Work
HHS101 - Intro to Counseling & Interviewing Skill
HHS102 - Intro to Interpersonal Theory & Practice
HHS201 - Mental Health Techician I
SWK131 - Introduction to Social Work
SWK150 - Counseling and Interviewing Skills
SWK160 - Interpersonal Dyn: Theories & Practices
SWK201 - Group Dynamic: Theories and Practices
SWK202 - Family Systems: Theories and Practices
SWK290 - Social Work Practicum

Sociology Department

Learn More About: Transfer Opportunities

Courses

SOC131 - Introduction to Sociology
SOC132 - Marriage & the Family
SOC151 - Contemporary Social Problems
SOC152 - Women, Men, and Society
SOC212 - Leadership Diverse Communities Organizat
SOC251 - Ethnic & Racial Diversity in Society
SOC253 - Sociology of Deviance
SOC254 - Social Psychology
SSC131 - Survey of the Social Sciences
SSC235 - Topics in Social Science
SSCO190 - Co-op in Social Science
SSCO290 - Co-op in Social Sciences

Speech Department

Learn More About: Transfer Opportunities

Courses

SPC131 - Intro to Public Speaking
SPC145 - Interpersonal Communication

Supply Chain Management Department

Career Opportunities - Supply Chain Management Certificate Program:

- Customer Service Manager
- International Logistics Manager
- Inventory Control Manager
- Logistics Engineer
- Logistics Manager
- Logistics Services Salesperson
- Logistics Software Manager
- Materials Manager
- Production Manager
- Purchasing Manager
- Supply Chain Analyst
- Supply Chain Consultant
- Supply Chain Manager
- Systems Support Manager
- Transportation Manager
- Vendor Managed Inventory Coordinator
- Warehouse Operations Manager

Occupational Exposure/Risk:

Varies by career in SCM. Operations, transportation, and warehouse management could have slightly greater physical risk than other positions within a firm.

Career Opportunities - Supply Chain Management Associate in Applied Science Program:

- Customer Service Manager
- International Logistics Manager
- Inventory Control Manager
- Logistics Engineer
- Logistics Manager
- Logistics Services Salesperson
- Logistics Software Manager
- Materials Manager
- Production Manager
- Purchasing Manager
- Supply Chain Analyst
- Supply Chain Consultant
- Supply Chain Manager
- Systems Support Manager
- Transportation Manager
- Vendor Managed Inventory Coordinator
- Warehouse Operations Manager

Occupational Exposure/Risk:

Varies by career in SCM. Operations, transportation, and warehouse management may have slightly greater physical risk than will purchasing, systems support, or a supply chain manager.

Transfer Agreements: Related to Supply Chain

- Bachelor of Business Administration 2+2 agreement with **Eastern Michigan University**

Transfer Agreements: Other Opportunities

- Bachelor of Science in Health Administration 2+2 agreement with **Eastern Michigan University**

Learn More About: Transfer Opportunities

Programs

SCMGMT.AB - Supply Chain Management
SMTECH.CA - Supply Chain Management Technician

Courses

BSC130 - Tech Foundations Supply Chain Mgt
BSC230 - Logistics and Distribution Strategy
BSC240 - Operations and Supply Chain Management
BSC250 - Purchasing and Supply Chain Management
BSC260 - Global Logistics & Supply Chain Mgmt

Surgical Technician Department

Career Opportunities:

Surgical technologists are allied health professionals who are an integral part of the team of medical practitioners providing surgical care to patients in a variety of settings. The surgical technologist works under medical supervision to facilitate the safe and effective conduct of invasive surgical procedures. This individual works under the supervision of a surgeon to ensure that the operating room environment is safe, that equipment functions properly, and that the operative procedure is conducted under conditions that maximize patient safety.

A surgical technologist possesses expertise in the theory and application of sterile and aseptic technique and combines the knowledge of human anatomy, surgical procedures and implementation tools, and technologies to facilitate a physician's performance of invasive therapeutic and diagnostic procedures. Surgical technologists work in operating and delivery rooms, emergency room facilities, and the ambulatory care areas of hospitals and other medical institutions. They may also work in clinics and physicians' offices. Many surgical technologists are employed directly by surgeons and specialize in fields such as orthopedics, etc. A representative job profile for a surgical technologist can be obtained through the Health Careers Office.

Helpful qualities for surgical technologists include:

- A strong sense of responsibility
- An ability to work well with others
- Emotional stability
- An ability to respond quickly
- An ability to be orderly and work quickly
- An ability to work well under stress

Opportunities:

Demand for surgical technologists should remain strong due to the rising population of older persons, the segment of the population with the greater frequency of health care needs. Information regarding career placement and job success is available through either the Health Careers Office or the HFC Career Services Office.

Occupational Exposure/Risk:

Applicants considering a career in Surgical Technology should be aware that during their course of study and in subsequent employment in the field, they are likely to work in situations where exposure to infectious disease is possible. This is an occupational risk for all health care workers. Persons should not become health care workers unless they recognize and accept this risk. Proper education and strict adherence to well established infection-control guidelines can reduce the risk to a minimum. Thorough education in infection control procedures is an important part of the Surgical Technology program of study.

Latex Allergies:

Early recognition of sensitization to natural rubber latex (NRL) is crucial to prevent the occurrence of life-threatening reactions in sensitized healthcare workers. The program faculty strongly advises that students sensitized or allergic to latex consult a physician for guidance on the merits of continuing in a health care career. NRL sensitized students who choose to continue in the Surgical Technology program must notify the program director

Registry / Certification / Licensure Exam Information

Graduates of the program are eligible to sit for the National Certification exam offered by the National Board of Surgical Technology and Surgical Assisting for the designation of Certified Surgical Technologist (CST).

Program Completion Limits:

Program is twenty-one months in length. Students must complete all SRG courses within three years of beginning the formal program.

The College continuously attempts to improve each program and as a result, courses and/or requirements may be modified. Curriculum, course content, and admission criteria are subject to change by action of the College faculty and administration. Contact the Health Careers Office at (313) 845-9877 for any current program updates or visit HFC's homepage.

Learn More About: Transfer Opportunities

Programs

PRESURGTECH - Pre-Surgical Technologist
SURTC.AAS - Surgical Technologist

Courses

SRG101 - Introduction to Surgical Technology
SRG102 - Surgical Technology Introduction
SRG104 - Fundamentals of Surgical Technology
SRG105 - Introduction to Surgical Technology Lab
SRG106 - Fundamentals of Surgical Technology Lab
SRG120 - Surgical Procedures I
SRG140 - Surgical Techniques I
SRG150 - Surgical Techniques II
SRG152 - Advanced Surgical Techniques
SRG160 - Surgical Pharmacology
SRG209 - Surgical Externship I
SRG220 - Surgical Procedures II
SRG240 - Issues in Surgical Technology
SRG290 - Clinical Externship II

Theater Department

Programs

THEATRE.AA - Theatre

Courses

THEA131 - Theatre Appreciation
THEA132 - Acting I
THEA135 - Introduction to Stage Makeup
THEA138 - Stage Costuming
THEA149 - Children's Theatre Production
THEA150 - Stagecraft
THEA232 - Acting II
THEA235 - Topics in Theatre
THEA238 - Theatre History
THEA255 - Lighting
THEA256 - Directing
THEA260 - Acting III
THEA281 - Theatre Capstone
THEA1901 - Theatre Experience I
THEA1902 - Theatre Experience II
THEA1903 - Theatre Experience III
THEA2901 - Directed Study

All Programs

ACCOUNTING.CA - Accounting

Program Information

Program Title
Accounting

Program Code
ACCOUNTING.CA

Degree Type
Certificate of Achievement

Minimum Credits for Program Completion
26

Program Eligible for Financial Aid?
Yes

Subject
Accounting

Semesters to Complete Program
2

Program Description
Offers preparation for those interested in working as an accounting technician in a small- to medium-sized business. Students are trained to use a double-entry accounting system to perform basic accounting functions such as journalizing and posting business transactions; preparing adjusting entries, and basic financial statements. Students are trained in computerized accounting software (QuickBooks) and in the Microsoft Office Suite. Courses in business math applications, written business communication, and business office protocol are also part of the program.

Faculty Contact	Faculty Contact Email	Faculty Contact Phone	Faculty Contact Office Location
Victoria Swiencicki	vtswiencicki@hfcc.edu	313-845-6363	E-211G

Academic Advisor	Academic Advisor Contact Email	Academic Advisor Contact Phone	Academic Advisor Office Location
Ashlei Chears	achears@hfcc.edu	313-845-6486	E-211H

School
Business, Entrepreneurship, PD

Academic Department
Business & Economics

Program Learning Outcomes

Prepare financial statements according to Generally Accepted Accounting Principles (GAAP).

Demonstrate industry standard computer skills.

Prepare both wage and salary payroll including summary reports and journal entries.

What Classes do I take?

2-Year Plan
Accounting - CA: Recommended Sequence - Current
Total Credits
26 - 29
Description
Enrollment Status: Full Time

If you have questions about the order in which you should take these courses, or the availability of these courses, please contact your advisor or the faculty contact listed below.

Program Contact Information

Office Contact: School of Business, Entrepreneurship, and Professional Development: 313-845-9645, bepdinfo@hfcc.edu, Technology Bldg, Room: E-211

Faculty Contact: Victoria Swiencicki: 313-845-6363, vtswiencicki@hfcc.edu, Technology Bldg, Room: E-211G

Academic Advisor: Ashlei Chears: 313-845-6486, achears@hfcc.edu, Technology Bldg, Room: E-211H

For students in an older version of this program, please visit Henry Ford College Catalog Archive to view required courses.

Year	Semester	Semester Credits
Year 1	Fall	13 - 15

Courses
- BAC131 - Introduction to Financial Accounting

Semester Credits
4
Contact Hours
62

Courses
- SPC131 - Intro to Public Speaking

Semester Credits
3
Contact Hours
47

Courses
- CIS100 - Introduction to Information Technology

Semester Credits
3
Contact Hours
47

Courses
- BMA110 - Business Math
  OR
- MATH115 - College Algebra

Semester Credits
3 - 5
Contact Hours
47 - 77

Year	Semester	Semester Credits
Year 1	Winter	13 - 14

Courses
- BAC132 - Introduction to Managerial Accounting

Semester Credits
4
Contact Hours
62

Courses
- BBA131 - Introduction to Business

Semester Credits 4
Contact Hours 62

Courses
- BCA145 - Spreadsheets

Semester Credits 3
Contact Hours 47

Courses
- BAC141 - Computerized Accounting-QuickBooks
  OR
- BAC235 - Tax Accounting

Semester Credits 2 - 3
Contact Hours 32 - 47

Program Requirements

Minimum Credits for Program Completion	Minimum GPA required for Graduation	HFC Credit Hour Residency Requirement
26	2.000	20

Simple Requisites

Core Course Requirements

Accounting CA - Core Course Requirements
Type
Completion Requirement

Complete ALL of the following Courses:
- BAC131-Intro to Financial Accounting 4 credits
- BAC132-Intro to Managerial Accounting 4 credits
- BCA145-Spreadsheets 3 credits
- SPC131-Introduction Public Speaking 3 credits
- BBA131-Intro to Business 4 credits
- CIS100-Intro Info Tech 3 credits

Support Course Requirements

Accounting CA - Support Course Requirements
Type
Completion Requirement

Complete at least 1 of the following courses:
- BAC141-Computerized Acct - QB 2 credits
  OR BAC235-Tax Acct I 3 credits

Category 3: Mathematics

Complete at least 1 of the following courses:
- BMA110-Business Math 3 credits
  OR MATH110-Intermediate Algebra 4 credits

ACCTG.AB - Accounting

Program Information

Program Title
Accounting AB Degree

Program Code
ACCTG.AB

Degree Type
Associate in Business

Minimum Credits for Program Completion
61

Program Eligible for Financial Aid?
Yes

Subject
Accounting

Semesters to Complete Program
4

Program Description
Explores accounting theory and practice, and how accounting interrelates with other important business operations such as payroll, budget, and finance.

Faculty Contact
Victoria Swiencicki

Faculty Contact Email
vtswiencicki@hfcc.edu

Faculty Contact Phone
313-845-6363

Faculty Contact Office Location
E-211G

Academic Advisor
Ashlei Chears

Academic Advisor Contact Email
achears@hfcc.edu

Academic Advisor Contact Phone
313-845-6486

Academic Advisor Office Location
E-211H

School
Business, Entrepreneurship, PD

Academic Department
Business & Economics

Program Learning Outcomes

- Prepare financial statements according to Generally Accepted Accounting Principles (GAAP).
- Evaluate business decisions given the legal and economic framework in which business functions.
- Analyze financial statements.
- Prepare final reports summarizing planning and control activities.
- Demonstrate effective written, verbal, and nonverbal communication in the business environment.
- Demonstrate industry-standard computer skills.

What Classes do I take?

2-Year Plan
Accounting - AB: Recommended Sequence - Current
Total Credits
60 - 63
Description
Enrollment Status: Full Time

If you have questions about the order in which you should take these courses, or the availability of these courses, please contact your advisor or the faculty contact listed below.

Program Contact Information

Office Contact: School of Business, Entrepreneurship, and Professional Development: 313-845-9645, bepdinfo@hfcc.edu, Technology Bldg, Room: E-211

Faculty Contact: Victoria Swiencicki: 313-845-6363, vtswiencicki@hfcc.edu, Technology Bldg, Room: E-211G

Academic Advisor: Ashlei Chears: 313-845-6486, achears@hfcc.edu, Technology Bldg, Room: E-211H

For students in an older version of this program, please visit Henry Ford College Catalog Archive to view required courses.

Year	Semester	Semester Credits
Year 1	Fall	14 - 17

Courses
- BAC131 - Introduction to Financial Accounting

Semester Credits 4
Contact Hours 62

Courses
- BBA131 - Introduction to Business

Semester Credits 4
Contact Hours 62

Courses
- CIS100 - Introduction to Information Technology

Semester Credits 3
Contact Hours 47

Courses
- MATH115 - College Algebra
  OR
- MATH131 - Mathematics for the Modern World
  OR
- MATH141 - Introduction to Statistics
  OR
- MATH165 - Mathematics for Calculus
  OR
- MATH175 - Precalculus
  OR
- MATH180 - Calculus I
  OR
- MATH183 - Calculus II
  OR
- MATH275 - Discrete Mathematics
  OR
- MATH280 - Calculus III
  OR
- MATH283 - Linear Algebra
  OR
- MATH288 - Differential Equations

Semester Credits 3 - 6
Contact Hours 62 - 92

Year	Semester	Semester Credits
Year 1	Winter	16

Courses
- BAC132 - Introduction to Managerial Accounting

Semester Credits 4
Contact Hours 62

Courses
- BEC151 - Principles of Macroeconomics

Semester Credits 3
Contact Hours 47

Courses
- SPC131 - Intro to Public Speaking

Semester Credits 3
Contact Hours 47

Courses
- ENG131 - Introduction to College Writing

Semester Credits 3
Contact Hours 47

Courses
- Electives: Complete additional 100-level, or higher, credits to complete this degree. (Generic)

Semester Credits 3
Contact Hours 47

Year	Semester	Semester Credits
Year 2	Fall	14

Courses
- BAC231 - Asset Accounting

Semester Credits 4
Contact Hours 62

Courses
- BEC152 - Principles of Microeconomics

Semester Credits 3
Contact Hours 47

Courses
- ENG132 - College Writing and Research
  OR
- ENG132H - Honors College Writing and Research
  OR
- ENG135 - Business & Technical Writing & Research

Semester Credits 3
Contact Hours 47

Courses
- Electives: Complete additional 100-level, or higher, credits to complete this degree. (Generic)

Semester Credits 4
Contact Hours 62

Year	Semester	Semester Credits
Year 2	Winter	16

Courses
- BAC235 - Tax Accounting
  OR
- BAC262 - Cost Accounting

Semester Credits 3
Contact Hours 47

Courses
- BCA145 - Spreadsheets

Semester Credits 3
Contact Hours 47

Courses
- BLW253 - Business Law and the Legal Environment

Semester Credits 4
Contact Hours 62

Courses
- Electives: Complete additional 100-level, or higher, credits to complete this degree. (Generic)

Semester Credits
6
Contact Hours
94

Program Requirements

Minimum Credits for Program Completion
61

Minimum GPA required for Graduation
2.000

HFC Credit Hour Residency Requirement
20

Simple Requisites

Core Course Requirements

Accounting - AB - Core Course Requirements
Type
Completion Requirement

Complete ALL of the following Courses:
- BAC131-Intro to Financial Accounting 4 credits
- BAC132-Intro to Managerial Accounting 4 credits
- BAC231-Asset Accounting 4 credits
- BCA145-Spreadsheets 3 credits

Complete at least 1 of the following courses:
- **OR** BAC235-Tax Acct I 3 credits
  OR BAC262-Cost Accounting 3 credits

Support Course Requirements

Accounting AB - Support Course Requirements
Type
Completion Requirement

Complete ALL of the following Courses:
- BBA131-Intro to Business 4 credits
- BEC151-Prin Macro Economics 3 credits
- BEC152-Prin Micro Economics 3 credits
- BLW253-Business Law & Legal Environme 4 credits
- CIS100-Intro Info Tech 3 credits
- ENG131-Introduction College Writing 3 credits
- SPC131-Introduction Public Speaking 3 credits

Category 2: English Composition or Communication

Complete at least 1 of the following courses:
- ENG132-College Writing and Research 3 credits
  OR ENG132H-Honors Coll Writing & Research 3 credits
  OR ENG135-Bus & Tech Writing & Research 3 credits

Category 3: Mathematics

Complete at least 1 of the following courses:
- MATH115-College Algebra 5 credits
  OR MATH131-Math for the Modern World 4 credits
  OR MATH141-Introduction to Statistics 4 credits
  OR
  OR MATH165-Mathematics for Calculus 6 credits
  OR MATH175-Precalculus 5 credits
  OR MATH180-Calculus 1 5 credits
  OR MATH183-Calculus II 5 credits
  OR MATH275-Discrete Mathematics 4 credits
  OR MATH280-Calculus III 5 credits
  OR MATH283-Linear Algebra 3 credits
  OR MATH288-Differential Equations 5 credits

ARCON.AAS - Architecture/Construction Technology

Program Information

Program Title
Architecture/Construction Technology AAS Degree

Program Code
ARCON.AAS

Degree Type
Associate in Applied Science

Minimum Credits for Program Completion
63

Program Eligible for Financial Aid?
Yes

Subject
Architecture/Construction Tech

Semesters to Complete Program
5

Program Description
Teaches architectural CAD/drafting and building construction methods and materials including both residential and commercial building types. Laboratory classes provide students with experience in the areas of residential and commercial construction materials, computer-aided drafting and design, cost estimating, construction methods, presentation techniques, residential construction practices and use of surveying equipment. Covers the principles and necessary skills of the architectural profession supported by an understanding of building construction through hands-on activities designed to provide students with a practical skill-based education.

Faculty Contact
Chad Richert

Faculty Contact Email
crichert@hfcc.edu

Faculty Contact Phone
313-317-1515

Faculty Contact Office Location
E-115C

Academic Advisor
Rachel Vanzutphen

Academic Advisor Contact Email
rvanzutphen@hfcc.edu

Academic Advisor Contact Phone
313-845-9873

Academic Advisor Office Location
E-211L

School
Business, Entrepreneurship, PD

Academic Department
Building Sciences

Program Learning Outcomes

Demonstrate employable skills (attendance, written communication, verbal communication, teamwork) in the fields of architecture and/or construction.

Demonstrate the professional practice of architecture and construction.

Prepare a series of commercial construction documents utilizing current industry software and accepted architectural standards and techniques.

Prepare a series of residential construction documents utilizing current industry software and accepted architectural standards and techniques.

Develop a series of design presentation drawings utilizing traditional and computerized techniques.

Select the appropriate construction materials and systems in residential and commercial projects.

Demonstrate knowledge of sustainable materials and energy efficient systems in residential and commercial projects.

Apply basic construction methods and procedures as they relate to a residential construction project.

What Classes do I take?

2-Year Plan
Architecture/Construction Technology - AAS: Recommended Sequence - Current
Total Credits
63 - 66
Description
Enrollment Status: Full Time

If you have questions about the order in which you should take these courses, or the availability of these courses, please contact your advisor or the faculty contact listed below.

Program Contact Information

Office Contact: School of Business, Entrepreneurship, and Professional Development: 313-845-9645, bepdinfo@hfcc.edu, Technology Bldg, Room: E-211

Faculty Contact: Chad Richert: 313-317-1515, crichert@hfcc.edu, Technology Bldg, Room: E-115C

Academic Advisor: Rachel Vanzutphen, 313-845-9873, rvanzutphen@hfcc.edu, Technology Bldg, Room E-211L

For students in an older version of this program, please visit Henry Ford College Catalog Archive to view required courses.

Year	Semester	Semester Credits
Year 1	Fall	15

Courses
- BLDA100 - Introduction to Autocad

Semester Credits 4
Contact Hours 77

Courses
- BLDA110 - Visual Communications

Semester Credits 4
Contact Hours 77

Courses
- BLDA120 - Introduction to Carpentry

Semester Credits 4
Contact Hours 77

Courses
- Computer Technology - 2020

Semester Credits
3
Contact Hours
47

Year	Semester	Semester Credits
Year 1	Winter	15

Courses
- BLDA130 - Introduction to Revit

Semester Credits
4
Contact Hours
77

Courses
- BLDA140 - Construction Systems 1

Semester Credits
4
Contact Hours
77

Courses
- BLDA150 - Environmental Bldg Systems

Semester Credits
4
Contact Hours
77

Courses
- CAT1 - Gen Ed Applied - 2020

Semester Credits
3
Contact Hours
47

Year	Semester	Semester Credits
Year 1	Summer	3 - 6

Courses
- CAT3 - Gen Ed Applied - 2025

Semester Credits
3 - 6
Contact Hours
47 - 92

Year	Semester	Semester Credits
Year 2	Fall	15

Courses
- BLDA230 - Residential Studio

Semester Credits
4
Contact Hours
77

Courses
- BLDA240 - Construction Systems 2

Semester Credits
4
Contact Hours
77

Courses
- BLDA250 - Surveying & Site Design

Semester Credits
4
Contact Hours
77

Courses
- Gen Ed - 3 hrs - 2025

Semester Credits
3
Contact Hours
47

Year	Semester	Semester Credits
Year 2	Winter	15

Courses
- BLDA260 - Construction Estimating

Semester Credits
4
Contact Hours
77

Courses
- BLDA270 - Commercial Design Studio

Semester Credits
4
Contact Hours
77

Courses
- BLDA280 - Bldg Science Capstone

Semester Credits
4
Contact Hours
77

Courses
- Gen Ed - 3 hrs - 2025

Semester Credits	3
Contact Hours	47

Program Requirements

Minimum Credits for Program Completion	Minimum GPA required for Graduation	HFC Credit Hour Residency Requirement
63	2.000	20

Simple Requisites

Core Course Requirements

Architecture/Construction Technology AAS - Core Course Requirements
Type
Completion Requirement

Complete ALL of the following Courses:
- BLDA100-Introduction to Autocad 4 credits
- BLDA110-Visual Communications 4 credits
- BLDA120-Introduction to Carpentry 4 credits
- BLDA130-Introduction to Revit 4 credits
- BLDA140-Construction Systems 1 4 credits
- BLDA150-Environmental Bldg Systems 4 credits
- BLDA230-Residential Studio 4 credits
- BLDA240-Construction Systems 2 4 credits
- BLDA250-Surveying & Site Design 4 credits
- BLDA260-Construction Estimating 4 credits
- BLDA270-Commercial Design Studio 4 credits
- BLDA280-Bldg Science Capstone 4 credits

General Education Requirements

Architecture/Construction Technology AAS - General Education Course Requirements
Type
Completion Requirement

Category 1: English Composition

Complete at least 1 courses in the following course sets:
- CAT1 - Gen Ed Applied - 2020

Category 3: Mathematics

Complete at least 1 courses in the following course sets:
- CAT3 - Gen Ed Applied - 2025

Category 7: General Education

Earn at least 6 credits from the following:
- Gen Ed - 6 hrs - 2025

Additional Comments:
See General Education Requirements for Applied Degrees for details.

Degree Specific Requirements

Architecture/Construction Technology AAS - Degree Specific Course Requirements
Type
Completion Requirement

Computer Technology

Complete at least 1 courses in the following course sets:
- Computer Technology - 2020

Additional Comments:
See Degree Specific Requirements for details.

ASSET.AAS - Automotive Service (ASSET)

Program Information

Program Title
Automotive Service (ASSET) AAS Degree

Program Code
ASSET.AAS

Degree Type
Associate in Applied Science

Minimum Credits for Program Completion
69

Program Eligible for Financial Aid?
Yes

Subject
Asset Program

Semesters to Complete Program
5

Program Description
Prepares individuals for service and repair positions in automobile dealerships and independent garages. Courses provide successful students with the job competencies and skills required for entry-level employment. In addition to completing core, support, and General Education credits, students are required to participate in cooperative education at local automobile repair facilities.

Program Accreditation Information
The Automotive Service (ASSET) program is fully certified by the National Institute for Automotive Service Excellence (ASE), is fully certified in all Ford Motor Company STST credentialing areas and is fully accredited as a MAST (Master Automotive Service Technology) program by the ASE Education Foundation.

1503 Edwards Ferry Rd., NE Suite 401

Leesburg, VA 20176

http://www.aseeducationfoundation.org/

Faculty Contact	Faculty Contact Email	Faculty Contact Phone	Faculty Contact Office Location
Kristopher Young	ksyoung@hfcc.edu	313-845-6324	E-162C

Academic Advisor	Academic Advisor Contact Email	Academic Advisor Contact Phone	Academic Advisor Office Location
Rachel Vanzutphen	rvanzutphen@hfcc.edu	313-845-9873	E-211L

School
Business, Entrepreneurship, PD

Academic Department
Automotive Technology

Program Learning Outcomes

Demonstrate knowledge of the career opportunities in the automotive service industry.

Develop the requisite entry-level skills and knowledge for employment in the automotive service industry.

Demonstrate the utilization of safety hazards standards/precautions as associated with the automotive service industry, and develop and demonstrate the necessary skills to work safely in auto labs and service shop environments.

Demonstrate the characteristics and standards of professionalism that contribute to an effective job performance in a manner that include behavior, appearance and punctuality.

Demonstrate effective communication skills both in the written and verbal forms to communicate difficult and technical information to others, including fellow students, instructors and/or customers.

Apply the learned theories of automotive technology to specific situations to reach conclusion resulting in the proper diagnosis and repair through the use of interpreted data, and previous experiences, and to identify root causes.

Demonstrate the utilization of technology reflective to the task to effectively retrieve information to solve complex problems through critical analysis to ensuring adequate preparations for the advancements that take place in the automotive service industry.

What Classes do I take?

2-Year Plan
Automotive Service (ASSET) - AAS: Recommended Sequence - Current
Total Credits
69
Description
Enrollment Status: Full Time

If you have questions about the order in which you should take these courses, or the availability of these courses, please contact your advisor or the faculty contact listed below.

Program Contact Information

Office Contact: School of Business, Entrepreneurship, and Professional Development: 313-845-9645, bepdinfo@hfcc.edu, Technology Bldg, Room: E-211

Faculty Contact: Kristopher Young: 313-845-6324, ksyoung@hfcc.edu, Technology Bldg, Room: E-162C

Academic Advisor: Rachel Vanzutphen, 313-845-9873, rvanzutphen@hfcc.edu, Technology Bldg, Room: E-211L

For students in an older version of this program, please visit Henry Ford College Catalog Archive to view required courses.

Year	Semester	Semester Credits
Year 1	Fall	16

Courses
- AUTO102 - Auto Fundamentals&Dealership Operations

Semester Credits 3
Contact Hours 62

Courses
- AUTO108 - Basic Automotive Electricity

Semester Credits 3
Contact Hours 62

Courses
- AUTO135 - Mathematics for the Technician

Semester Credits 3
Contact Hours 47

Courses
- AUTO160 - Automotive Chassis Units

Semester Credits 2
Contact Hours 62

Courses
- AUTO191 - Coordinated Education Experience Auto 1

Semester Credits 2
Contact Hours 60 - 320

Courses
- CIS100 - Introduction to Information Technology

Semester Credits 3
Contact Hours 47

Year	Semester	Semester Credits
Year 1	Winter	13

Courses
- AUTO105 - Internal Combustion Engines

Semester Credits 3
Contact Hours 92

Courses
- AUTO110 - Automotive Electrical Systems

Semester Credits 3
Contact Hours 92

Courses
- AUTO131 - Automotive Ignition Systems

Semester Credits 2
Contact Hours 32

Courses
- AUTO162 - Antilock Brake Systems

Semester Credits 3
Contact Hours 62

Courses
- AUTO192 - Coordinated Education Experience Auto 2

Semester Credits 2
Contact Hours 60 - 320

Year	Semester	Semester Credits
Year 1	Summer	9

Courses
- AUTO120 - Automotive Fuel Management Systems

Semester Credits 2
Contact Hours 62

Courses
- AUTO132 - Computer Controld Ignition Sys&engin Per

Semester Credits 2
Contact Hours 32

Courses
- AUTO224 - Automotive Air Conditioning

Semester Credits 2
Contact Hours 32

Courses
- CAT4 - Gen Ed Applied - 2020

Semester Credits 3
Contact Hours 47

Year	Semester	Semester Credits
Year 2	Fall	14

Courses
- AUTO140 - Automotive Transmissions Systems

Semester Credits 3
Contact Hours 92

Courses
- AUTO150 - Automotive Diagnosis & Engine Eval

Semester Credits 2
Contact Hours 62

Courses
- AUTO165 - Electronic Steering and Suspension

Semester Credits 4
Contact Hours 62

Courses
- AUTO291 - Coordinated Education Experience Auto 3

Semester Credits
2
Contact Hours
60 - 320

Courses
- ENG131 - Introduction to College Writing

Semester Credits
3
Contact Hours
47

Year	Semester	Semester Credits
Year 2	Winter	17

Courses
- AUTO142 - Automatic Transmission Controls/Diagnosi

Semester Credits
2
Contact Hours
32

Courses
- AUTO145 - Manual Transmissions and Transaxles

Semester Credits
4
Contact Hours
62

Courses
- AUTO231 - Diesel Engine Performance & Diagnosis

Semester Credits
4
Contact Hours
62

Courses
- AUTO237 - Comput Engine/Veh Netwrk, Prg, & Sec Sys

Semester Credits
2
Contact Hours
62

Courses
- AUTO292 - Coordinated Education Experience Auto 4

Semester Credits
2
Contact Hours
60 - 320

Courses
- ENG135 - Business & Technical Writing & Research

Semester Credits
3
Contact Hours
47

Program Requirements

Minimum Credits for Program Completion
69

Minimum GPA required for Graduation
2.000

HFC Credit Hour Residency Requirement
20

Simple Requisites

Core Course Requirements

Automotive Service (ASSET) AAS - Core Course Requirements
Type
Completion Requirement

Complete ALL of the following Courses:
- AUTO102-Auto Fund&Dealership Operatio 3 credits
- AUTO105-Internal Combustion Engines 3 credits
- AUTO108-Basic Auto Elec 3 credits
- AUTO110-Auto Elect 3 credits
- AUTO120-Auto Fuel Management Systems 2 credits
- AUTO131-Auto Ignition Systems 2 credits
- AUTO132-Comp Control Ignit Sys & Engin 2 credits
- AUTO140-Auto Transmission 3 credits
- AUTO142-Auto Tran Cntrl Diagnosis 2 credits
- AUTO145-Manual Trans & Driveline 4 credits
- AUTO150-Automotive Diag & Engine Eval 2 credits
- AUTO160-Auto Chassis Units 2 credits
- AUTO162-ABS Brakes 3 credits
- AUTO165-Electron Steering Suspension 4 credits
- AUTO191-Coordinated Edu Exp Auto Svc 1 2 credits
- AUTO192-Coordinated Edu Exp Auto Svc 2 2 credits
- AUTO224-Auto Air Conditioning 2 credits
- AUTO231-Diesel Eng Perf & Diagnosis 4 credits
- AUTO237-Comp Eng/Veh Ntwk, Prg, Sec Sy 2 credits
- AUTO291-Coordinated Edu Exp Auto Svc 3 2 credits
- AUTO292-Coordinated Edu Exp Auto Svc 4 2 credits

Support Course Requirements

Automotive Service (ASSET) AAS - Support Course Requirements
Type
Completion Requirement

Complete ALL of the following Courses:
- ENG131-Introduction College Writing 3 credits
- ENG135-Bus & Tech Writing & Research 3 credits
- CIS100-Intro Info Tech 3 credits
- AUTO135-Mathematics for the Technician 3 credits

General Education Requirements

Automotive Service (ASSET) AAS - General Education Course Requirements
Type
Completion Requirement

Category 4: Social Sciences

Complete at least 1 courses in the following course sets:
- CAT4 - Gen Ed Applied - 2020

Additional Comments:
See General Education Requirements for Applied Degrees for details.

Degree Specific Requirements

Automotive Service (ASSET) AAS - Degree Specific Course Requirements
Type
Completion Requirement

Computer Technology

Complete ALL of the following Courses:
- CIS100-Intro Info Tech 3 credits

Additional Comments:
See Degree Specific Requirements for details.

AUTOT.AAS - Automotive Technology

Program Information

Program Title
Automotive Technology AAS Degree

Program Code
AUTOT.AAS

Degree Type
Associate in Applied Science

Minimum Credits for Program Completion
60

Program Eligible for Financial Aid?
Yes

Subject
Automotive Technology

Semesters to Complete Program
5

Program Description
Offers an in-depth study of the multiple systems found on today's vehicles, including electrical, fuel, ignition, power, and drive train. Provides a thorough exposure to the technical aspects of the automobile, and to develop manual and critical thinking skills related to diagnostics, servicing, and testing. Courses provide a broad technical background for individuals interested in automotive technology and related industries.

Laboratory classes offer hands-on experience designed to strengthen understanding of the theoretical concerns outlined during lecture periods. Laboratories possess many of the latest equipment currently used to service today s automobiles, including representative types of various engines, chassis, transmissions, rear axles, and testing equipment.

Program Accreditation Information
The Automotive Technology program is fully certified by the National Institute for Automotive Service Excellence (ASE) and is fully accredited as a MAST (Master Automotive Service Technology) program by the ASE Education Foundation.

1503 Edwards Ferry Rd., NE Suite 401

Leesburg, VA 20176

http://www.aseeducationfoundation.org/

Faculty Contact
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Faculty Contact Email
Asmith179@hfcc.edu

Faculty Contact Phone
313-845-6324

Faculty Contact Office Location
E-162C

Academic Advisor
Rachel Vanzutphen

Academic Advisor Contact Email
rvanzutphen@hfcc.edu

Academic Advisor Contact Phone
313-845-9873

Academic Advisor Office Location
E-162F

School
Business, Entrepreneurship, PD

Academic Department
Automotive Technology

Program Learning Outcomes

Develop knowledge of the career opportunities in the automotive service industry

Develop the requisite entry-level skills and knowledge for employment in the automotive service industry

Demonstrate the utilization of safety hazards standards/precautions as associated with the automotive service industry and develop and demonstrate the necessary skills to work safely in auto labs and service shop environments

Demonstrate the characteristics and standards of professionalism that contribute to an effective job performance in a manner that include behavior, appearance, and punctuality

Demonstrate effective communication skills both in the written and verbal forms to communicate difficult and technical information to others, including fellow students, instructors, and/or customers

Apply the learned theories of automotive technology to specific situations to reach conclusion resulting in the proper diagnosis and repair through the use of interpreted data, previous experiences and to identify root causes

Demonstrate the utilization of technology reflective to the task to effectively retrieve information to solve complex problems through critical analysis to ensuring adequate preparations for the advancements that take place in the automotive technology industry

What Classes do I take?

2-Year Plan
Automotive Technology: Recommended Sequence - Current
Total Credits
60 - 62
Description
Enrollment Status: Full Time

If you have questions about the order in which you should take these courses, or the availability of these courses, please contact your advisor or the faculty contact listed below.

Program Contact Information

Office Contact: School of Business, Entrepreneurship, and Professional Development: 313-845-9645, bepdinfo@hfcc.edu, Technology Bldg, Room: E-211

Faculty Contact: Kristopher Young: 313-845-6324, ksyoung@hfcc.edu, Technology Bldg, Room: E-162C

Academic Advisor: Rachel Vanzutphen: 313-845-9873, rvanzutphen@hfcc.edu, Technology Bldg, Room: E-211L

For students in an older version of this program, please visit Henry Ford College Catalog Archive to view required courses.

Year	Semester	Semester Credits
Year 1	Fall	13

Courses
- AUTO103 - Intro Auto Industry & Auto Maintenance

Semester Credits 2
Contact Hours 32

Courses
- AUTO105 - Internal Combustion Engines

Semester Credits 3
Contact Hours 92

Courses
- AUTO110 - Automotive Electrical Systems

Semester Credits 3
Contact Hours 92

Courses
- AUTO160 - Automotive Chassis Units

Semester Credits 2
Contact Hours 62

Courses
- CIS100 - Introduction to Information Technology

Semester Credits 3
Contact Hours 47

Year	Semester	Semester Credits
Year 1	Winter	14 - 16

Courses
- AUTO121 - Electronic Fuel & Emissions Control Syst

Semester Credits 3
Contact Hours 92

Courses
- AUTO140 - Automotive Transmissions Systems

Semester Credits 3
Contact Hours 92

Courses
- AUTO225 - Automotive Air Conditioning

Semester Credits 2
Contact Hours 32

Courses
- ENG131 - Introduction to College Writing

Semester Credits 3
Contact Hours 47

Courses
- CAT3 - Gen Ed Applied - 2025

Semester Credits 3 - 5
Contact Hours 47 - 92

Year	Semester	Semester Credits
Year 1	Summer	4

Courses
- AUTO131 - Automotive Ignition Systems

Semester Credits 2
Contact Hours 32

Courses
- AUTO215 - Automotive Engine Dynamometer

Semester Credits 2
Contact Hours 32

Year	Semester	Semester Credits
Year 2	Fall	15

Courses
- ENG135 - Business & Technical Writing & Research

Semester Credits 3
Contact Hours 47

Courses
- AUTO145 - Manual Transmissions and Transaxles

Semester Credits 4
Contact Hours 62

Courses
- AUTO216 - Chassis Dynamometer

Semester Credits 2
Contact Hours 32

Courses
- AUTO231 - Diesel Engine Performance & Diagnosis

Semester Credits 4
Contact Hours 62

Courses
- AUTO237 - Comput Engine/Veh Netwrk, Prg, & Sec Sys

Semester Credits 2
Contact Hours 62

Year	Semester	Semester Credits
Year 2	Winter	14

Courses
- AUTO150 - Automotive Diagnosis & Engine Eval

Semester Credits 2
Contact Hours 62

Courses
- AUTO260 - Hybrid and Electric Vehicle Systems

Semester Credits
3
Contact Hours
62

Courses
- AUTO262 - Electronic Automotive Chassis

Semester Credits
2
Contact Hours
62

Courses
- AUTO293 - Auto Technology Service Experience Lab I

Semester Credits
4
Contact Hours
124

Courses
- CAT6 - Gen Ed Applied - 2020

Semester Credits
3
Contact Hours
47

2-Year Plan
Automotive Technology: Recommended Sequence 2022-2023
Total Credits
65 - 70
Description
Enrollment Status: Full Time

If you have questions about the order in which you should take these courses, or the availability of these courses, please contact your advisor or the faculty contact listed above.

Program Contact Information

Office Contact: School of Business, Entrepreneurship, and Professional Development: 313-845-9645, bepdinfo@hfcc.edu, Technology Bldg, Room: E-211

Faculty Contact: Kristopher Young: 313-845-6324, ksyoung@hfcc.edu, Technology Bldg, Room: E-162C

Academic Advisor: Rachel Vanzutphen: 313-845-9873, rvanzutphen@hfcc.edu, Technology Bldg, Room: E-211L

For students in an older version of this program, please visit Henry Ford College Catalog Archive to view required courses.

Year	Semester	Semester Credits
Year 1	Fall	13

Courses
- AUTO103 - Intro Auto Industry & Auto Maintenance

Semester Credits
2
Contact Hours
32

Courses
- AUTO105 - Internal Combustion Engines

Semester Credits
3
Contact Hours
92

Courses
- AUTO110 - Automotive Electrical Systems

Semester Credits
3
Contact Hours
92

Courses
- AUTO160 - Automotive Chassis Units

Semester Credits
2
Contact Hours
62

Courses
- CIS100 - Introduction to Information Technology

Semester Credits
3
Contact Hours
47

Year	Semester	Semester Credits
Year 1	Winter	13 - 16

Courses
- AUTO120 - Automotive Fuel Management Systems

Semester Credits
2
Contact Hours
62

Courses
- AUTO140 - Automotive Transmissions Systems

Semester Credits
3
Contact Hours
92

Courses
- AUTO225 - Automotive Air Conditioning

Semester Credits 2
Contact Hours 32

Courses
- ENG131 - Introduction to College Writing

Semester Credits 3
Contact Hours 47

Courses
- CAT3 - Gen Ed Applied - 2025

Semester Credits 3 - 6
Contact Hours 47 - 92

Year	Semester	Semester Credits
Year 1	Summer	4

Courses
- AUTO131 - Automotive Ignition Systems

Semester Credits 2
Contact Hours 32

Courses
- AUTO215 - Automotive Engine Dynamometer

Semester Credits 2
Contact Hours 32

Year	Semester	Semester Credits
Year 2	Fall	19

Courses
- ENG135 - Business & Technical Writing & Research

Semester Credits 3
Contact Hours 47

Courses
- AUTO145 - Manual Transmissions and Transaxles

Semester Credits 4
Contact Hours 62

Courses
- AUTO181 - Technical Automotive Welding

Semester Credits 4
Contact Hours 62

Courses
- AUTO216 - Chassis Dynamometer

Semester Credits 2
Contact Hours 32

Courses
- AUTO231 - Diesel Engine Performance & Diagnosis

Semester Credits 4
Contact Hours 62

Courses
- AUTO237 - Comput Engine/Veh Netwrk, Prg, & Sec Sys

Semester Credits 2
Contact Hours 62

Year	Semester	Semester Credits
Year 2	Winter	16 - 18

Courses
- AUTO150 - Automotive Diagnosis & Engine Eval

Semester Credits 2
Contact Hours 62

Courses
- AUTO230 - Automotive Diesel Principles

Semester Credits 2
Contact Hours 32

Courses
- AUTO260 - Hybrid and Electric Vehicle Systems

Semester Credits 3
Contact Hours 62

Courses
- AUTO290 - Co-op in Automotive Technology

Semester Credits 2
Contact Hours 3 - 150

Courses
- AUTO293 - Auto Technology Service Experience Lab I

Semester Credits 4
Contact Hours 124

Courses
- CAT6 - Gen Ed Applied - 2020

Semester Credits 3 - 5
Contact Hours 47 - 77

Program Requirements

Minimum Credits for Program Completion
60

Minimum GPA required for Graduation
2.000

HFC Credit Hour Residency Requirement
20

Simple Requisites

Core Course Requirements

Automotive Technology AAS - Core Course Requirements
Type
Completion Requirement

Complete ALL of the following Courses:
- AUTO103-Intro Auto Industry Auto Maint 2 credits
- AUTO105-Internal Combustion Engines 3 credits
- AUTO110-Auto Elect 3 credits
- AUTO121-Elec Fuel & Emissions Control 3 credits
- AUTO131-Auto Ignition Systems 2 credits
- AUTO140-Auto Transmission 3 credits
- AUTO145-Manual Trans & Driveline 4 credits
- AUTO150-Automotive Diag & Engine Eval 2 credits
- AUTO160-Auto Chassis Units 2 credits
- AUTO215-Auto Engine Dynamometer 2 credits
- AUTO216-Chassis Dynamometer 2 credits
- AUTO225-Automotive Air Conditioning 2 credits
- AUTO231-Diesel Eng Perf & Diagnosis 4 credits
- AUTO237-Comp Eng/Veh Ntwk, Prg, Sec Sy 2 credits
- AUTO260-Hybrid & Electric Vehicle Syst 3 credits
- AUTO293-Auto Tech Serv Exp Lab I 4 credits
- AUTO262-Electronic Auto Chassis 2 credits

Support Course Requirements

Automotive Technology AAS - Support Course Requirements
Type
Completion Requirement

Complete ALL of the following Courses:
- ENG131-Introduction College Writing 3 credits
- ENG135-Bus & Tech Writing & Research 3 credits
- CIS100-Intro Info Tech 3 credits

General Education Requirements

Automotive Technology AAS - General Education Course Requirements
Type
Completion Requirement

Category 3: Mathematics

Complete at least 1 courses in the following course sets:
- CAT3 - Gen Ed Applied - 2025

Category 6: Natural Sciences

Complete at least 1 courses in the following course sets:
- CAT6 - Gen Ed Applied - 2020

Additional Comments:
See General Education Requirements for Applied Degrees for details.

AUTOT.CA - Automotive Technology

Program Information

Program Title
Automotive Technology Certificate

Program Code
AUTOT.CA

Degree Type
Certificate of Achievement

Minimum Credits for Program Completion
41

Program Eligible for Financial Aid?
Yes

Subject
Automotive Technology

Semesters to Complete Program
4

Program Description
Covers the various systems found on today's vehicles, including electrical, fuel, ignition, power, and drive train. Course work provides a broad background in numerous fields allied to the automobile industry and provides actual experience to strengthen understanding of the theory learned in the classroom. Laboratory classrooms are equipped with some of the latest equipment, including representative types of engines, chassis, transmissions, rear axles, and considerable testing equipment. This program can be completed individually or applied to the Associate degree in Automotive Technology. Because this certificate transfers into a two-year degree program, it is highly recommended that students complete certificate requirements prior to degree requirements.

Program Accreditation Information
The Automotive Technology Certificate program is fully certified by the National Institute for Automotive Service Excellence (ASE), and is fully accredited as a MAST (Master Automotive Service Technology) program by the ASE Education Foundation. 1503 Edwards Ferry Rd., NE Suite 401 Leesburg, VA 20176 http://www.aseeducationfoundation.org/

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313-317-6536

Faculty Contact Office Location
E-162F

Academic Advisor
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rvanzutphen@hfcc.edu

Academic Advisor Contact Phone
313-845-9873

Academic Advisor Office Location
E-211L

School
Business, Entrepreneurship, PD

Academic Department
Automotive Technology

Program Learning Outcomes

Demonstrate proper use of special tools.

Use safety equipment properly.

Dissemble, perform critical measurements, resemble, and demonstrate satisfactory operation of components.

Perform job specific tasks as required for NATEF accreditation.

Demonstrate proper use of tools and equipment commonly found in industry.

Research proper service information using common current industry technology.

Demonstrate proper care and use of emerging technology tools and equipment.

Demonstrate proper care and use of alternative energy tools and equipment.

Demonstrate proficiency and understanding of emerging technologies.

What Classes do I take?

2-Year Plan
Automotive Technology - CA: Recommended Sequence - Current
Total Credits
41
Description
Enrollment Status: Full Time

If you have questions about the order in which you should take these courses, or the availability of these courses, please contact your advisor or the faculty contact listed below.

Program Contact Information

Office Contact: School of Business, Entrepreneurship, and Professional Development: 313-845-9645, bepdinfo@hfcc.edu, Technology Bldg, Room: E-211

Faculty Contact: Ashley Smith: 313-317-6536, asmith179@hfcc.edu, Technology Bldg, Room: E-162F

Academic Advisor: Rachel Vanzutphen: 313-845-9873, rvanzutphen@hfcc.edu, Technology Bldg, Room: E-211L

For students in an older version of this program, please visit Henry Ford College Catalog Archive to view required courses.

Year	Semester	Semester Credits
Year 1	Fall	11

Courses
- AUTO103 - Intro Auto Industry & Auto Maintenance

Semester Credits 2
Contact Hours 32

Courses
- AUTO105 - Internal Combustion Engines

Semester Credits 3
Contact Hours 92

Courses
- AUTO110 - Automotive Electrical Systems

Semester Credits
3
Contact Hours
92

Courses
- AUTO121 - Electronic Fuel & Emissions Control Syst

Semester Credits
3
Contact Hours
92

Year	Semester	Semester Credits
Year 1	Winter	11

Courses
- AUTO131 - Automotive Ignition Systems

Semester Credits
2
Contact Hours
32

Courses
- AUTO140 - Automotive Transmissions Systems

Semester Credits
3
Contact Hours
92

Courses
- AUTO145 - Manual Transmissions and Transaxles

Semester Credits
4
Contact Hours
62

Courses
- AUTO160 - Automotive Chassis Units

Semester Credits
2
Contact Hours
62

Year	Semester	Semester Credits
Year 2	Fall	8

Courses
- AUTO150 - Automotive Diagnosis & Engine Eval

Semester Credits
2
Contact Hours
62

Courses
- AUTO215 - Automotive Engine Dynamometer

Semester Credits
2
Contact Hours
32

Courses
- AUTO216 - Chassis Dynamometer

Semester Credits
2
Contact Hours
32

Courses
- AUTO237 - Comput Engine/Veh Netwrk, Prg, & Sec Sys

Semester Credits
2
Contact Hours
62

Year	Semester	Semester Credits
Year 2	Winter	11

Courses
- AUTO225 - Automotive Air Conditioning

Semester Credits
2
Contact Hours
32

Courses
- AUTO231 - Diesel Engine Performance & Diagnosis

Semester Credits
4
Contact Hours
62

Courses
- AUTO260 - Hybrid and Electric Vehicle Systems

Semester Credits
3
Contact Hours
62

Courses
- AUTO262 - Electronic Automotive Chassis

Semester Credits 2
Contact Hours 62

2-Year Plan
Automotive Technology - CA: Recommended Sequence 2022-2023
Total Credits
44
Description
Enrollment Status: Full Time

If you have questions about the order in which you should take these courses, or the availability of these courses, please contact your advisor or the faculty contact listed below.

Program Contact Information

Office Contact: School of Business, Entrepreneurship, and Professional Development: 313-845-9645, bepdinfo@hfcc.edu, Technology Bldg, Room: E-211

Faculty Contact: Ashley Smith: 313-317-6536, asmith179@hfcc.edu, Technology Bldg, Room: E-162F

Academic Advisor: Rachel Vanzutphen: 313-845-9873, rvanzutphen@hfcc.edu, Technology Bldg, Room: E-211L

For students in an older version of this program, please visit Henry Ford College Catalog Archive to view required courses.

Year	Semester	Semester Credits
Year 1	Fall	10

Courses
- AUTO103 - Intro Auto Industry & Auto Maintenance

Semester Credits 2
Contact Hours 32

Courses
- AUTO105 - Internal Combustion Engines

Semester Credits 3
Contact Hours 92

Courses
- AUTO110 - Automotive Electrical Systems

Semester Credits 3
Contact Hours 92

Courses
- AUTO237 - Comput Engine/Veh Netwrk, Prg, & Sec Sys

Semester Credits 2
Contact Hours 62

Year	Semester	Semester Credits
Year 1	Winter	13

Courses
- AUTO120 - Automotive Fuel Management Systems

Semester Credits 2
Contact Hours 62

Courses
- AUTO131 - Automotive Ignition Systems

Semester Credits 2
Contact Hours 32

Courses
- AUTO140 - Automotive Transmissions Systems

Semester Credits 3
Contact Hours 92

Courses
- AUTO145 - Manual Transmissions and Transaxles

Semester Credits 4
Contact Hours 62

Courses
- AUTO150 - Automotive Diagnosis & Engine Eval

Semester Credits 2
Contact Hours 62

Year	Semester	Semester Credits
Year 2	Fall	10

Courses
- AUTO160 - Automotive Chassis Units

Semester Credits 2
Contact Hours 62

Courses
- AUTO181 - Technical Automotive Welding

Semester Credits 4
Contact Hours 62

Courses
- AUTO215 - Automotive Engine Dynamometer

Semester Credits 2
Contact Hours 32

Courses
- AUTO216 - Chassis Dynamometer

Semester Credits 2
Contact Hours 32

Year	Semester	Semester Credits
Year 2	Winter	11

Courses
- AUTO225 - Automotive Air Conditioning

Semester Credits
2
Contact Hours
32

Courses
- AUTO230 - Automotive Diesel Principles

Semester Credits
2
Contact Hours
32

Courses
- AUTO231 - Diesel Engine Performance & Diagnosis

Semester Credits
4
Contact Hours
62

Courses
- AUTO260 - Hybrid and Electric Vehicle Systems

Semester Credits
3
Contact Hours
62

Program Requirements

Minimum Credits for Program Completion
41

Minimum GPA required for Graduation
2.000

HFC Credit Hour Residency Requirement
20

Simple Requisites

Core Course Requirements

Automotive Technology CA - Core Course Requirements
Type
Completion Requirement

Complete ALL of the following Courses:
- AUTO103-Intro Auto Industry Auto Maint 2 credits
- AUTO105-Internal Combustion Engines 3 credits
- AUTO110-Auto Elect 3 credits
- AUTO121-Elec Fuel & Emissions Control 3 credits
- AUTO131-Auto Ignition Systems 2 credits
- AUTO140-Auto Transmission 3 credits
- AUTO145-Manual Trans & Driveline 4 credits
- AUTO150-Automotive Diag & Engine Eval 2 credits
- AUTO160-Auto Chassis Units 2 credits
- AUTO215-Auto Engine Dynamometer 2 credits
- AUTO216-Chassis Dynamometer 2 credits
- AUTO225-Automotive Air Conditioning 2 credits
- AUTO231-Diesel Eng Perf & Diagnosis 4 credits
- AUTO237-Comp Eng/Veh Ntwk, Prg, Sec Sy 2 credits
- AUTO260-Hybrid & Electric Vehicle Syst 3 credits
- AUTO262-Electronic Auto Chassis 2 credits

BAKING.CA - Baking and Pastry

Program Information

Program Title
Baking and Pastry Certificate

Program Code
BAKING.CA

Degree Type
Certificate of Achievement

Minimum Credits for Program Completion
30

Program Eligible for Financial Aid?
Yes

Subject
Culinary Arts, Hospitality Mgm

Semesters to Complete Program
3

Program Description
Let your creativity shine while learning the various facets of the baking and pastry fields. Courses in this certificate program may be applied toward an Associate in Applied Science Degree in Culinary Arts and/or an Associate in Applied Science Degree in Hotel/Restaurant Management.

Program Accreditation Information
The Associate in Applied Science in Culinary Arts at HFC is fully accredited by the Accrediting Commission of the American Culinary Federation Educational Foundation.

Faculty Contact
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epgackenbach@hfcc.edu

Faculty Contact Phone
313-317-1572

Faculty Contact Office Location
N-155B

Academic Advisor
Ashlei Chears

Academic Advisor Contact Email
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Academic Advisor Contact Phone
313-845-6486

Academic Advisor Office Location
E-211H

School
Business, Entrepreneurship, PD

Academic Department
Culinary Arts + Hospitality Management

Admissions Requirements

Admissions Requirements
Official HFC chef's uniform required to be purchased prior to beginning classes for culinary lab courses - contact department on process to order uniforms. Visit the Hospitality Department in M-163 in the Culinary Arts & Student Center building, or online at https://culinary.hfcc.edu/ for uniform ordering information.

Program Learning Outcomes

Execute a menu from start to finish in compliance with ACF category F and G standards for edible hot and cold food.

Based on NRA standards, decide how to handle various types of food in order to prevent food borne illness.

What Classes do I take?

2-Year Plan
Baking and Pastry - CA: Recommended Sequence - Current
Total Credits
30
Description
Enrollment Status: Full Time

If you have questions about the order in which you should take these courses, or the availability of these courses, please contact your advisor or the faculty contact listed below.

Program Contact Information

Office Contact: School of Business, Entrepreneurship, and Professional Development: 313-845-9645, bepdinfo@hfcc.edu, Technology Bldg, Room: E-211

Faculty Contact: Eric Gackenbach: 313-317-1572, epgackenbach@hfcc.edu, Campus Safety, Room: N-155B

Academic Advisor: Ashlei Chears: 313-845-6486, achears@hfcc.edu, Technology Bldg, Room: E-211H

For students in an older version of this program, please visit Henry Ford College Catalog Archive to view required courses.

Year	Semester	Semester Credits
Year 1	Fall	10

Courses
- HOSP105 - Applied Food Service Sanitation

Semester Credits 2
Contact Hours 32

Courses
- HOSP220 - Introduction to Baking and Cooking

Semester Credits 2
Contact Hours 32

Courses
- HOSP224 - Culinary Skills and Nutritional Cooking

Semester Credits 3
Contact Hours 69.5

Courses
- HOSP226 - Fundamentals of Baking

Semester Credits 3
Contact Hours 69.5

Year	Semester	Semester Credits
Year 1	Winter	11

Courses
- HOSP245 - Hotel and Restaurant Desserts

Semester Credits 3
Contact Hours 47

Courses
- HOSP340 - A'la Carte and Buffet Cookery

Semester Credits 8
Contact Hours 152

Year	Semester	Semester Credits

Year	Semester	Semester Credits
Year 2	Fall	9

Courses
- HOSP255 - Professional Cake Decorating

Semester Credits
3
Contact Hours
62

Courses
- HOSP331 - Modern and European Pastry

Semester Credits
6
Contact Hours
107

Program Requirements

Minimum Credits for Program Completion
30

Minimum GPA required for Graduation
2.000

HFC Credit Hour Residency Requirement
20

Simple Requisites

Core Course Requirements

Baking and Pastry CA - Core Course Requirements
Type
Completion Requirement

HOSP220 Intro to Baking & Cooking, HOSP224 Culinary Skills & Nutritional, and HOSP226 Fundamentals of Baking must be taken concurrently.

Complete ALL of the following Courses:
- HOSP105-Applied Food Serv Sanitation 2 credits
- HOSP220-Intro to Baking & Cooking 2 credits
- HOSP224-Culinary Skills & Nutritional 3 credits
- HOSP226-Fundamentals of Baking 3 credits
- HOSP245-Hotel & Rest Desserts 3 credits
- HOSP255-Professional Cake Decorating 3 credits
- HOSP331-Modern and European Pastry 6 credits
- HOSP340-A'la Carte and Buffet Cookery 8 credits

BASICENGMECH.CA - Basic Engineering: Mechanical

Program Information

Program Title
Basic Engineering: Mechanical

Program Code
BASICENGMECH.CA

Degree Type
Certificate of Achievement

Minimum Credits for Program Completion
16

Program Eligible for Financial Aid?
Yes

Subject
Pre-Engineering

Semesters to Complete Program
2

Program Description
Enables students to become knowledgeable in basic mechanical engineering pathway by practicing engineering design process, various engineering computation tools (Excel, MATLAB, and Python), and structural design concepts. Course works include engineering classes in the first two years of a mechanical engineering or a mechanical engineering technology program.

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313-317-1746

Faculty Contact Office Location
J-106B

Academic Advisor
Brandi Walthall-Johnson

Academic Advisor Contact Email
bswalthall-johnson@hfcc.edu

Academic Advisor Contact Phone
313-317-6811

Academic Advisor Office Location
G-120J

School
Science, Tech, Engr & Math

Academic Department
Engineering Technology

Program Learning Outcomes

Develop knowledge of career opportunities and demonstrate the requisite entry level of a mechanical engineering assistant.

Utilize engineering design process in search for solutions to real-world engineering problems.

Work in teams to formulate a complex engineering problem into a system of mathematical equations and use computational tools to find solutions.

Explain basic concepts and principles of statics with applications to Newton's Laws of Motion to engineering problems.

What Classes do I take?

2-Year Plan
Basic Engineering: Mechanical - CA: Recommended Sequence - Current
Total Credits
16 - 20
Description
If you have questions about the order in which you should take these courses, or the availability of these courses, please contact your advisor or the faculty contact listed below.

Program Contact Information

Office Contact: School of Science, Technology, Engineering, and Mathematics (STEM): 313-845-9632, steminfo@hfcc.edu, Health Careers Education Ctr, Room: G-110, G-122 and J-115

Faculty Contact: Hassan Mohseni Nameghi: 313-317-1746, hnameghi@hfcc.edu, Science Bldg, Room: J-106B

Academic Advisor: Brandi Walthall-Johnson: 313-317-6811, bswalthall-johnson@hfcc.edu, Health Careers Bldg, Room: G-120J

For students in an older version of this program, please visit Henry Ford College Catalog Archive to view required courses.

Year	Semester	Semester Credits
Year 1	Fall	10 - 12

Courses
- ENGR125 - Introduction Computation for Engineers

Semester Credits 3
Contact Hours 62

Courses
- ENGR130 - Introduction to Engineering

Semester Credits 3
Contact Hours 47

Courses
- MATH110 - Intermediate Algebra
  OR
- MATH115 - College Algebra
  OR
- MATH165 - Mathematics for Calculus
  OR
- MATH175 - Precalculus
  OR
- MATH180 - Calculus I
  OR
- MATH183 - Calculus II
  OR
- MATH275 - Discrete Mathematics
  OR
- MATH280 - Calculus III
  OR
- MATH288 - Differential Equations

Semester Credits 4 - 6
Contact Hours 62 - 92

Year	Semester	Semester Credits
Year 1	Winter	6 - 8

Courses
- ENGR232 - Statics
  OR
- ENGT245 - Applied Statics

Semester Credits
3
Contact Hours
62

Courses
- DRAF120 - Introduction to CAD
  OR
- ENGR121 - Engineering Design and 3D Printing
  OR
- ENGR235 - Mechanics of Materials

Semester Credits
2 - 4
Contact Hours
32 - 92

Courses
- Electives: Complete additional 100-level, or higher, credits to complete this degree. (Generic)

Semester Credits
1
Contact Hours
16

Program Requirements

Minimum Credits for Program Completion
16

Minimum GPA required for Graduation
2.000

HFC Credit Hour Residency Requirement
20

Simple Requisites

Core Course Requirements

Basic Engineering: Mechanical CA - Core Course Requirements
Type
Completion Requirement

Complete ALL of the following Courses:
- ENGR125-Intro Computation for Engineer 3 credits
- ENGR130-Intro to Engineering 3 credits

Mechanical Design 1

Complete at least 1 of the following courses:
- ENGR232-Statics 3 credits
  OR ENGT245-Applied Statics 3 credits

Mechanical Design 2

Complete at least 1 of the following courses:
- DRAF120-Intro to CAD 4 credits
  OR ENGR121-Engin Design & 3D Printing 3 credits
  OR ENGR235-Mechanics of Materials 2 credits

Support Course Requirements

Basic Engineering: Mechanical CA - Support Course Requirements
Type
Completion Requirement

Mathematics Support Course

Complete at least 1 of the following courses:
-
  OR MATH110-Intermediate Algebra 4 credits
  OR MATH115-College Algebra 5 credits
  OR MATH165-Mathematics for Calculus 6 credits
  OR MATH175-Precalculus 5 credits
  OR MATH180-Calculus 1 5 credits
  OR MATH183-Calculus II 5 credits
  OR MATH275-Discrete Mathematics 4 credits
  OR MATH280-Calculus III 5 credits
  OR MATH288-Differential Equations 5 credits

BIOLOGY.AS - Biology

Program Information

Program Title
Biology

Program Code
BIOLOGY.AS

Degree Type
Associate in Science

Minimum Credits for Program Completion
60

Program Eligible for Financial Aid?
Yes

Subject
Biology

Semesters to Complete Program
4

Program Description
Prepares students to transfer to a 4-year institution to complete a bachelor s degree in the life sciences. Designed in collaboration with several university biology departments to ensure maximum transferability into the various programs they offer.

Faculty Contact
Carla Serfas

Faculty Contact Email
caserfas@hfcc.edu

Faculty Contact Phone
313-317-1771

Faculty Contact Office Location
J-114G

Academic Advisor
Elyse Hogan

Academic Advisor Contact Email
echogan@hfcc.edu

Academic Advisor Contact Phone
313-845-9730

Academic Advisor Office Location
J-114A

School
Science, Tech, Engr & Math

Academic Department
Biological Sciences

Program Learning Outcomes

Demonstrate an understanding of how scientific knowledge is constructed, and how this process relies on evidence rather than opinions or beliefs.

Demonstrate a basic mastery of biological content.

Apply critical thinking and an understanding of biological and chemical concepts and principles in the explanation of complex processes.

Demonstrate an understanding of the major themes of biology and be able to identify those themes in the analysis of scientific information.

Analyze and interpret scientific information in various forms, including text, graphs, tables, and figures.

Accurately convey scientific information by creating graphs using real data and relating the graphs to the original questions and hypotheses.

Convey scientific explanations using proper written and verbal English.

Design and carry out a scientific investigation using appropriate experimental design and methodology.

Demonstrate the ability to safely and correctly use biological instrumentation and proper laboratory techniques.

Demonstrate a knowledge base in chemistry.

What Classes do I take?

2-Year Plan
Biology - AS: Recommended Sequence - Current
Total Credits
60 - 62
Description
Enrollment Status: Full Time

If you have questions about the order in which you should take these courses, or the availability of these courses, please contact your advisor or the faculty contact listed below.

Program Contact Information

Office Contact: School of Science, Technology, Engineering, and Mathematics (STEM): 313-845-9632, steminfo@hfcc.edu, Health Careers Education Ctr, Room: G-110, G-122 and J-115

Faculty Contact: Carla Serfas: 313-317-1771, caserfas@hfcc.edu Science Bldg, Room: J-114G

Academic Advisor: Elyse Hogan: 313-845-9730, echogan@hfcc.edu, Science Bldg, Room: J-114A

For students in an older version of this program, please visit Henry Ford College Catalog Archive to view required courses.

Year	Semester	Semester Credits
Year 1	Fall	16 - 18

Courses
- BIO150 - Biology: Organisms, Genes, and Ecology

Semester Credits 4
Contact Hours 92

Courses
- CHEM141 - Principles Gen & Inorganic Chemistry I

Semester Credits 5
Contact Hours 107

Courses
- ENG131 - Introduction to College Writing
  OR
- ENG131A - Introduction to College Writing (ALP)
  OR
- ENG131H - Honors Introduction to College Writing

Semester Credits
3
Contact Hours
47

Courses
- CAT3 - Coll Algebra - Gen Ed Transfer - 2020
  OR
- CAT3 - Quant Lit - Gen Ed Transfer - 2025
  OR
- CAT3 Stats - Gen Ed Transfer - 2025

Semester Credits
4 - 6
Contact Hours
62 - 92

Year	Semester	Semester Credits
Year 1	Winter	15

Courses
- BIO152 - Cell and Molecular Biology

Semester Credits
4
Contact Hours
92

Courses
- CHEM142 - Principles Gen & Inorganic Chemistry II

Semester Credits
5
Contact Hours
107

Courses
- Computer Technology - 2020

Semester Credits
3
Contact Hours
47

Courses
- ENG132 - College Writing and Research
  OR
- ENG132H - Honors College Writing and Research
  OR
- ENG135 - Business & Technical Writing & Research

Semester Credits
3
Contact Hours
47

Year	Semester	Semester Credits
Year 2	Fall	14

Courses
- CAT6 - Transfer - Lec and Lab - 2025
  OR
- CAT6 - Transfer - Lec Only - 2020
  OR
- CAT6 - Gen Ed Transfer - Lab Only - 2020

Semester Credits
4
Contact Hours
62

Courses
- CAT6 - Transfer - Lec and Lab - 2025
  OR
- CAT6 - Transfer - Lec Only - 2020
  OR
- CAT6 - Gen Ed Transfer - Lab Only - 2020

Semester Credits
4
Contact Hours
62

Courses
- CAT4 - Gen Ed Transfer - 2020

Semester Credits
3
Contact Hours
47

Courses
- CAT5 - Gen Ed Transfer - 2025

Semester Credits
3
Contact Hours
47

Year	Semester	Semester Credits
Year 2	Winter	15

Courses
- CAT6 - Transfer - Lec and Lab - 2025
  OR
- CAT6 - Transfer - Lec Only - 2020
  OR
- CAT6 - Gen Ed Transfer - Lab Only - 2020

Semester Credits 4
Contact Hours 62

Courses
- CAT4 - Gen Ed Transfer - 2020

Semester Credits 3
Contact Hours 47

Courses
- CAT5 - Gen Ed Transfer - 2025

Semester Credits 3
Contact Hours 47

Courses
- Electives: Complete additional 100-level, or higher, credits to complete this degree. (Generic)

Semester Credits 5
Contact Hours 77

Program Requirements

Minimum Credits for Program Completion
60
Minimum GPA required for Graduation
2.000
HFC Credit Hour Residency Requirement
20

Simple Requisites

Core Course Requirements

Biology AS - Core Course Requirements
Type
Completion Requirement

Complete ALL of the following Courses:
- BIO150-Bio: Organisms, Genes, Ecology 4 credits
- BIO152-Cell and Molecular Biology 4 credits
- CHEM141-Prin Gen & Inorgan Chem I 5 credits
- CHEM142-Prin Gen & Inorgan Chem II 5 credits

Natural Science: Complete 12 credits

Earn at least 12 credits from the following:
- BIO130-Evolution and Behavior 4 credits
  OR BIO138-Environmental Science Lecture 3 credits
  OR BIO139-Environmental Science Lab 2 credits
  OR BIO143-Zoology 4 credits
  OR BIO233-Anatomy and Physiology I 4 credits
  OR BIO234-Anatomy and Physiology II 4 credits
  OR BIO251-Microbiology 5 credits
  OR
  OR
  OR
  OR CHEM241-Organic Chemistry I 4 credits
  OR CHEM242-Organic Chemistry II 4 credits
  OR CHEM243-Microscale Organic Chem Lab I 2 credits
  OR CHEM244-MicroscaleOrganic Chem Lab II 2 credits
  OR PHYS131-General Physics I 4 credits
  OR PHYS132-General Physics II 4 credits
  OR PHYS231-Engineering Physics I 5 credits
  OR PHYS232-Engineering Physics II 5 credits
  OR

Support Course Requirements

Biology AS - Support Course Requirements
Type
Completion Requirement

Category 1: English Composition

Complete at least 1 of the following courses:
- ENG131-Introduction College Writing 3 credits
  OR ENG131A-Intro College Writing (ALP) 3 credits
  OR ENG131H-Honors Intro College Writing 3 credits

Category 2: English Composition or Communications

Complete at least 1 of the following courses:
- ENG132-College Writing and Research 3 credits
  OR ENG132H-Honors Coll Writing & Research 3 credits
  OR ENG135-Bus & Tech Writing & Research 3 credits

Category 3: Mathematics

Complete one General Education Requirements for Transfer Degrees (MTA) approved Math course from the college algebra or statistics track below.

Complete at least 1 of the following courses:
- MATH115-College Algebra 5 credits
  OR MATH165-Mathematics for Calculus 6 credits
  OR MATH175-Precalculus 5 credits
  OR MATH180-Calculus 1 5 credits
  OR MATH183-Calculus II 5 credits
  OR MATH275-Discrete Mathematics 4 credits
  OR MATH280-Calculus III 5 credits
  OR MATH283-Linear Algebra 3 credits
  OR MATH288-Differential Equations 5 credits
  OR MATH141-Introduction to Statistics 4 credits

General Education Requirements

Biology AS - General Education Courses
Type
Completion Requirement

Category 4: Social Sciences

Complete any two, from different disciplines, from the General Education Requirements for Transfer Degrees (MTA) list.

Complete at least 2 courses in the following course sets:

- CAT4 - Gen Ed Transfer - 2020

Category 5: Humanities and Fine Arts

Complete any two, from different disciplines, from the General Education Requirements for Transfer Degrees (MTA) list

Complete at least 2 courses in the following course sets:

- CAT5 - Gen Ed Transfer - 2025

Additional Comments:
See General Education Requirements for Transfer Degrees for details.

Degree Specific Requirements

Biology AS - Degree Specific Requirements
Type
Completion Requirement

Complete at least 1 courses in the following course sets:

- Computer Technology - 2020

Additional Comments:
See Degree Specific Requirements for details.

BUSAD.AB - Business Administration

Program Information

Program Title
Business Administration AB Degree

Program Code
BUSAD.AB

Degree Type
Associate in Business

Minimum Credits for Program Completion
60

Program Eligible for Financial Aid?
Yes

Subject
Business Administration

Semesters to Complete Program
4

Program Description
Provides students with fundamental knowledge in business studies. Designed to afford students with the ability to transfer to specific four-year bachelor degree programs with the maximum number of credits possible. The core courses in the Business Administration program consist of courses that are often required by four-year institutions to enter their business programs.

Faculty Contact
Jared Boyd

Faculty Contact Email
jpboyd@hfcc.edu

Faculty Contact Phone
313-845-9697

Faculty Contact Office Location
K-328

Academic Advisor
Ashlei Chears

Academic Advisor Contact Email
achears@hfcc.edu

Academic Advisor Contact Phone
313-845-6486

Academic Advisor Office Location
E-211H

School
Business, Entrepreneurship, PD

Academic Department
Business & Economics

Program Learning Outcomes

Explain how activities involved in operating a business connect with one another.

Analyze financial conditions utilizing principles of accounting.

Develop business strategies.

Analyze how economic forces and government policies affect business alternatives as well as social outcomes.

Evaluate business decisions based on their legal consequences.

Evaluate the opportunities and threats resulting from current business trends.

Model appropriate and effective verbal and nonverbal communication with employers, employees, team members, business partners, and customers.

Apply algebraic concepts to solve business related problems and conduct business research.

Employ computer software application programs such as word processing, spreadsheets, and database to perform ordinary business activities.

What Classes do I take?

2-Year Plan
Business Administration - AB: Recommended Sequence - Current
Total Credits
60 - 62
Description
Enrollment Status: Full Time

If you have questions about the order in which you should take these courses, or the availability of these courses, please contact your advisor or the faculty contact listed below.

Program Contact Information

Office Contact: School of Business, Entrepreneurship, and Professional Development: 313-845-9645, bepdinfo@hfcc.edu, Technology Bldg, Room: E-211

Faculty Contact: Jared Boyd: 313-845-9697, jpboyd@hfcc.edu, Liberal Arts Building, Room: K-328

Academic Advisor: Ashlei Chears: 313-845-6486, achears@hfcc.edu, Technology Bldg, Room: E-211H

For students in an older version of this program, please visit Henry Ford College Catalog Archive to view required courses.

Year	Semester	Semester Credits
Year 1	Fall	14 - 16

Courses

- BBA131 - Introduction to Business

Semester Credits	4
Contact Hours	62

Courses

- CIS100 - Introduction to Information Technology

Semester Credits	3
Contact Hours	47

Courses

- ENG131 - Introduction to College Writing

Semester Credits	3
Contact Hours	47

Courses
- MATH115 - College Algebra
  OR
- MATH131 - Mathematics for the Modern World
  OR
- MATH141 - Introduction to Statistics
  OR
- MATH165 - Mathematics for Calculus
  OR
- MATH175 - Precalculus
  OR
- MATH180 - Calculus I
  OR
- MATH183 - Calculus II
  OR
- MATH275 - Discrete Mathematics
  OR
- MATH280 - Calculus III
  OR
- MATH283 - Linear Algebra
  OR
- MATH288 - Differential Equations

Semester Credits
4 - 6
Contact Hours
62 - 92

Year	Semester	Semester Credits
Year 1	Winter	14

Courses
- BAC131 - Introduction to Financial Accounting

Semester Credits
4
Contact Hours
62

Courses
- BEC151 - Principles of Macroeconomics

Semester Credits
3
Contact Hours
47

Courses
- BLW253 - Business Law and the Legal Environment

Semester Credits
4
Contact Hours
62

Courses
- SPC131 - Intro to Public Speaking

Semester Credits
3
Contact Hours
47

Year	Semester	Semester Credits
Year 2	Fall	16

Courses
- BAC132 - Introduction to Managerial Accounting

Semester Credits
4
Contact Hours
62

Courses
- BEC152 - Principles of Microeconomics

Semester Credits
3
Contact Hours
47

Courses
- ENG132 - College Writing and Research
  OR
- ENG132H - Honors College Writing and Research
  OR
- ENG135 - Business & Technical Writing & Research

Semester Credits
3
Contact Hours
47

Courses
- Electives: Complete additional 100-level, or higher, credits to complete this degree. (Generic)

Semester Credits
6
Contact Hours
94

Year	Semester	Semester Credits
Year 2	Winter	16

Courses
- Electives (Generic)

Semester Credits
16
Contact Hours
256

Program Requirements

Minimum Credits for Program Completion	Minimum GPA required for Graduation	HFC Credit Hour Residency Requirement
60	2.000	20

Simple Requisites

Core Course Requirements

Business Administration AB - Core Course Requirements
Type
Completion Requirement

Complete ALL of the following Courses:
- BAC131-Intro to Financial Accounting 4 credits
- BAC132-Intro to Managerial Accounting 4 credits
- BBA131-Intro to Business 4 credits
- BEC151-Prin Macro Economics 3 credits
- BEC152-Prin Micro Economics 3 credits

Support Course Requirements

Business Administration AB - Support Course Requirements
Type
Completion Requirement

Complete ALL of the following Courses:
- CIS100-Intro Info Tech 3 credits
- ENG131-Introduction College Writing 3 credits
- SPC131-Introduction Public Speaking 3 credits

Category 2: English Composition or Communication

Complete at least 1 of the following courses:
- ENG132-College Writing and Research 3 credits
  OR ENG132H-Honors Coll Writing & Research 3 credits
  OR ENG135-Bus & Tech Writing & Research 3 credits

Category 3: Mathematics

Complete at least 1 of the following courses:
- MATH115-College Algebra 5 credits
  OR MATH131-Math for the Modern World 4 credits
  OR MATH141-Introduction to Statistics 4 credits
  OR
  OR MATH165-Mathematics for Calculus 6 credits
  OR MATH175-Precalculus 5 credits
  OR MATH180-Calculus 1 5 credits
  OR MATH183-Calculus II 5 credits
  OR MATH275-Discrete Mathematics 4 credits
  OR MATH280-Calculus III 5 credits
  OR MATH283-Linear Algebra 3 credits
  OR MATH288-Differential Equations 5 credits

Complete additional 100-level, or higher, credits to complete this degree.

Earn at least 22 credits

CERTLC.CA - Lactation Consultant

Program Information

Program Title
Lactation Consultant

Program Code
CERTLC.CA

Degree Type
Certificate of Achievement

Minimum Credits for Program Completion
42

Program Eligible for Financial Aid?
Yes

Subject
Health Careers

Semesters to Complete Program
3

Program Accreditation Information
The Lactation Consultant Program is accredited by the Commission on Accreditation of Allied Health Education Programs, www.caahep.org upon the recommendation of the Lactation Education Accreditation and Approval Review Committee (LEAARC).

Commission on Accreditation of Allied Health Education Programs
9355-113th St N. #7709
Seminole, FL 33775
727-210-2350
www.caahep.org

Program Ratings IBCLE Credentialling Exam Pass Rate: 88%

Faculty Contact	Faculty Contact Email	Faculty Contact Phone	Faculty Contact Office Location
Cynthia Scheuer	cscheuer@hfcc.edu	313-317-6575	G-132A

Academic Advisor	Academic Advisor Contact Email	Academic Advisor Contact Phone	Academic Advisor Office Location
Samer Atris	satris1@hfcc.edu	313-317-6862	G-203C

School
Health & Human Services

Academic Department
Health Careers, Education, and Human Services

Admissions Requirements

Admissions Requirements
Admission Requirements and Eligibility

It is strongly recommended that AH100 Medical Terminology and BIO134 Essentials Anatomy&Physiology are completed before AH121. Additionally, acceptance to the lactation consultant program is contingent upon fulfilling and maintaining minimum program requirements and proof of the following:

- Health Insurance
- Physical examination
- TB testing/screening
- Immunizations as required
- Titers to assure immunity for specific conditions
- American Heart Association (AHA) BLS for Healthcare Professionals certification
- Must pass drug screening on first test
- Criminal background check

Courses Required for Program Admission
AH100 - Medical Terminology, BIO134 - Essentials of Anatomy and Physiology

Program Learning Outcomes

Identify the anatomy of the breast and hormones necessary for milk production.

Identify nutritional needs of the baby and breastfeeding mother.

Discuss ways to promote effective breastfeeding using evidenced-based principles.

Perform a comprehensive breast assessment.

Identify the impact of culture on breastfeeding.

Apply ethical and legal principles in the care of the breastfeeding mother.

Identify potential breastfeeding complications and interventions.

What Classes do I take?

2-Year Plan
Lactation Consultant - CA: Recommended Sequence - Current
Total Credits
42 - 45
Description
Enrollment Status: Full Time

If you have questions about the order in which you should take these courses, or the availability of these courses, please contact your advisor or the faculty contact listed above.

Program Contact Information

Office Contact: School of Health and Human Services: 313-845-9877, hhsinfo@hfcc.edu, Health Careers Education Ctr, Room: G-132

Faculty Contact: Cynthia Scheuer: 313-317-6575, cscheuer@hfcc.edu, Health Careers Education Ctr, Room: G-132A

Academic Advisor: Samer Atris: 313-317-6862, satris1@hfcc.edu, Health Careers Bldg, Room: G-203C

For students in an older version of this program, please visit Henry Ford College Catalog Archive to view required courses.

Year	Semester	Semester Credits
Year 1	Winter	15 - 18

Courses
- AH100 - Medical Terminology

Semester Credits 4
Contact Hours 62

Courses
- PSY131 - Introductory Psychology

Semester Credits 3
Contact Hours 47

Courses
- BIO134 - Essentials of Anatomy and Physiology
  OR
- BIO233 - Anatomy and Physiology I
- **AND** BIO234 - Anatomy and Physiology II

Semester Credits 5 - 8
Contact Hours 92 - 154

Courses
- HPE158 - Introduction to Nutrition
  OR
- HPE253 - Nutrition for the Professional

Semester Credits 3
Contact Hours 47

Year	Semester	Semester Credits
Year 1	Fall	13

Courses
- AH121 - Basic Lactation Concepts

Semester Credits 3
Contact Hours 47

Courses
- AH131 - Medicolegal Principles Hlthcr Practition

Semester Credits 3
Contact Hours 47

Courses
- AH190 - Lactation Consultant Practicum

Semester Credits 4
Contact Hours 200

Courses
- PSY253 - Lifespan Development

Semester Credits 3
Contact Hours 47

Year	Semester	Semester Credits
Year 2	Winter	14

Courses
- AH122 - Applied Principles of Breastfeeding

Semester Credits 4
Contact Hours 62

Courses
- AH141 - Introduction to Public Health

Semester Credits 3
Contact Hours 47

Courses
- AH192 - Lactation Consultant Adv Practicum Pathw

Semester Credits 4
Contact Hours 200

Courses
- SOC131 - Introduction to Sociology

Semester Credits 3
Contact Hours 47

Program Requirements

Minimum Credits for Program Completion	Minimum GPA required for Graduation	HFC Credit Hour Residency Requirement
42	2.000	20

Simple Requisites

Core Course Requirements

Lactation Consultant CA - Core Course Requirements
Type
Completion Requirement

Complete ALL of the following Courses:
- AH100-Medical Terminology 4 credits
- AH121-Basic Lactation Concepts 3 credits
- AH122-Applied Princ of Breastfeeding 4 credits
- AH131-Medicolegal Prin for Health 3 credits
- AH141-Introduction to Public Health 3 credits

Biology

Complete BIO134 Essentials Anatomy&Physiology OR BIO233 Anatomy and Physiology I and BIO234 Anatomy and Physiology II

Earn at least 5 credits from the following:
- BIO134-Essentials Anatomy&Physiology 5 credits
- BIO233-Anatomy and Physiology I 4 credits
  AND BIO234-Anatomy and Physiology II 4 credits

Nutrition

Complete at least 1 of the following courses:

- HPE158-Introduction to Nutrition 3 credits
  OR HPE253-Nutrition for the Professional 3 credits

Complete ALL of the following Courses:

- PSY131-Introductory Psychology 3 credits
- PSY253-Lifespan Development 3 credits
- SOC131-Introduction to Sociology 3 credits
- AH190-Lactation Consultant Practicum 4 credits
- AH192-Lactation Consult Adv Pract 4 credits

CHEMISTRY.AS - Chemistry

Program Information

Program Title
Chemistry

Program Code
CHEMISTRY.AS

Degree Type
Associate in Science

Minimum Credits for Program Completion
60

Program Eligible for Financial Aid?
Yes

Subject
Chemistry

Semesters to Complete Program
4

Program Description
Prepares students to transfer to a 4-year institution to pursue an American Chemical society approved chemistry major. It was designed in collaboration with several university chemistry departments to ensure maximum transferability into the various programs they offer.

Faculty Contact
Paul Root

Faculty Contact Email
pdroot@hfcc.edu

Faculty Contact Phone
313-845-6312

Faculty Contact Office Location
J-016A

Academic Advisor
Elyse Hogan

Academic Advisor Contact Email
echogan@hfcc.edu

Academic Advisor Contact Phone
313-845-9730

Academic Advisor Office Location
J-114A

School
Science, Tech, Engr & Math

Academic Department
Chemistry

Program Learning Outcomes

Demonstrate a basic mastery of the general chemistry topics identified in the ACS Guidelines for Chemistry in Two Year College Programs.

Demonstrate a basic mastery of the organic chemistry topics identified in the ACS Guidelines for Chemistry in Two Year College Programs.

Demonstrate a proficiency to safely and correctly use chemical instrumentation and proper laboratory techniques.

Analyze and interpret information from various sources, including experimental data and chemical literature.

Present experimental results using proper written and/or verbal English.

Design and carry out a scientific investigation using appropriate experimental design and methodology.

What Classes do I take?

2-Year Plan
Chemistry - AS: Recommended Sequence - Current
Total Credits
60 - 66
Description
Enrollment Status: Full Time

If you have questions about the order in which you should take these courses, or the availability of these courses, please contact your advisor or the faculty contact listed below.

Program Contact Information

Office Contact: School of Science, Technology, Engineering, and Mathematics (STEM): 313-845-9632, steminfo@hfcc.edu, Health Careers Education Ctr, Room: G-110, G-122 and J-115

Faculty Contact: Paul Root: 313-845-6312, pdroot@hfcc.edu, Science Bldg, Room: J-016A

Academic Advisor: Elyse Hogan: 313-845-9730, echogan@hfcc.edu, Science Bldg, Room: J-114A

For students in an older version of this program, please visit Henry Ford College Catalog Archive to view required courses.

Year	Semester	Semester Credits
Year 1	Fall	15 - 17

Courses

- CHEM141 - Principles Gen & Inorganic Chemistry I

Semester Credits 5
Contact Hours 107

Courses

- ENG131 - Introduction to College Writing
  OR
- ENG131A - Introduction to College Writing (ALP)
  OR
- ENG131H - Honors Introduction to College Writing

Semester Credits 3
Contact Hours 47

Courses

- CAT3 - Coll Algebra - Gen Ed Transfer - 2020
  OR
- CAT3 - Quant Lit - Gen Ed Transfer - 2025
  OR
- CAT3 Stats - Gen Ed Transfer - 2025

Semester Credits 4 - 6
Contact Hours 62 - 92

Courses

- CAT4 - Gen Ed Transfer - 2020

Semester Credits 3
Contact Hours 47

Year	Semester	Semester Credits
Year 1	Winter	15

Courses
- CHEM142 - Principles Gen & Inorganic Chemistry II

Semester Credits
5
Contact Hours
107

Courses
- CIS100 - Introduction to Information Technology

Semester Credits
3
Contact Hours
47

Courses
- ENG132 - College Writing and Research
  OR
- ENG132H - Honors College Writing and Research
  OR
- ENG135 - Business & Technical Writing & Research

Semester Credits
3
Contact Hours
47

Courses
- Electives: Complete additional 100-level, or higher, credits to complete this degree. (Generic)

Semester Credits
4
Contact Hours
62

Year	Semester	Semester Credits
Year 2	Fall	14 - 16

Courses
- CHEM241 - Organic Chemistry I

Semester Credits
4
Contact Hours
62

Courses
- CAT4 - Gen Ed Transfer - 2020

Semester Credits
3
Contact Hours
47

Courses
- CAT5 - Gen Ed Transfer - 2025

Semester Credits
3
Contact Hours
47

Courses
- BIO150 - Biology: Organisms, Genes, and Ecology
  OR
- BIO152 - Cell and Molecular Biology
  OR
- CHEM244 - Microscale Organic Chemistry Lab II
  OR
- PHYS231 - Engineering Physics I
  OR
- PHYS232 - Engineering Physics II

Semester Credits
4 - 6
Contact Hours
62 - 107

Year	Semester	Semester Credits
Year 2	Winter	16 - 18

Courses
- CHEM242 - Organic Chemistry II

Semester Credits
4
Contact Hours
62

Courses
- CHEM243 - Microscale Organic Chemistry Lab I

Semester Credits
2
Contact Hours
62

Courses
- CAT5 - Gen Ed Transfer - 2025

Semester Credits
3
Contact Hours
47

Courses
- BIO150 - Biology: Organisms, Genes, and Ecology
  OR
- BIO152 - Cell and Molecular Biology
  OR
- CHEM244 - Microscale Organic Chemistry Lab II
  OR
- PHYS231 - Engineering Physics I
  OR
- PHYS232 - Engineering Physics II

Semester Credits 4 - 6
Contact Hours 62 - 107

Courses
- Electives: Complete additional 100-level, or higher, credits to complete this degree. (Generic)

Semester Credits 3
Contact Hours 47

Program Requirements

Minimum Credits for Program Completion
60
Minimum GPA required for Graduation
2.000
HFC Credit Hour Residency Requirement
20

Simple Requisites

Core Course Requirements

Chemistry AS - Core Course Requirements
Type
Completion Requirement

Complete ALL of the following Courses:
- CHEM141-Prin Gen & Inorgan Chem I 5 credits
- CHEM142-Prin Gen & Inorgan Chem II 5 credits
- CHEM241-Organic Chemistry I 4 credits
- CHEM242-Organic Chemistry II 4 credits
- CHEM243-Microscale Organic Chem Lab I 2 credits

Natural Science

Earn at least 8 credits from the following:
- **OR** CHEM244-MicroscaleOrganic Chem Lab II 2 credits
  OR PHYS231-Engineering Physics I 5 credits
  OR PHYS232-Engineering Physics II 5 credits
  OR BIO150-Bio: Organisms, Genes, Ecology 4 credits
  OR BIO152-Cell and Molecular Biology 4 credits

Support Course Requirements

Chemistry AS - Support Course Requirements
Type
Completion Requirement

Category 1: English Composition

Complete at least 1 of the following courses:
- ENG131-Introduction College Writing 3 credits
  OR ENG131A-Intro College Writing (ALP) 3 credits
  OR ENG131H-Honors Intro College Writing 3 credits

Category 2: English Composition or Communications

Complete at least 1 of the following courses:
- ENG132-College Writing and Research 3 credits
  OR ENG132H-Honors Coll Writing & Research 3 credits
  OR ENG135-Bus & Tech Writing & Research 3 credits

Elective Hours

Earn at least 7 credits

General Education Requirements

Chemistry AS - General Education Course Requirements
Type
Completion Requirement

Category 3: Mathematics

Complete any one course from the General Education Requirements for Transfer Degrees (MTA) list.

Complete at least 1 courses in the following course sets:
- CAT3 - Coll Algebra - Gen Ed Transfer - 2020
- CAT3 - Quant Lit - Gen Ed Transfer - 2025
- CAT3 Stats - Gen Ed Transfer - 2025

Category 4: Social Sciences

Complete any two, from different disciplines, from the General Education Requirements for Transfer Degrees (MTA) list.

Complete at least 2 courses in the following course sets:
- CAT4 - Gen Ed Transfer - 2020

Category 5: Humanities and Fine Arts

Complete any two, from different disciplines, from the General Education Requirements for Transfer Degrees (MTA) list.

Complete at least 2 courses in the following course sets:
- CAT5 - Gen Ed Transfer - 2025

Additional Comments:
See General Education Requirements for Transfer Degrees for details.

Degree Specific Requirements

Chemistry AS - Degree Specific Course Requirements
Type
Completion Requirement

Computer Technology

Complete at least 1 courses in the following course sets:

- Computer Technology - 2020

Additional Comments:
See Degree Specific Requirements for details.

CISWEBDEV.AAS - Computer Information Systems - Web Development

Program Information

Program Title
Computer Information Systems - Web Development

Program Code
CISWEBDEV.AAS

Degree Type
Associate in Applied Science

Minimum Credits for Program Completion
60

Program Eligible for Financial Aid?
Yes

Subject
Computer Information Systems

Semesters to Complete Program
5

Program Description
Prepares graduates for an entry-level position as a Full Stack Web Developer, Web Administrator, or Web Programmer. The Web Development Associate Degree distinguishes itself with extensive hands-on laboratory experience using the latest technology and software. Industry-experienced, full-time faculty provide the highest quality instruction on the latest web development environments and frameworks, graphics and design techniques, client and server-side coding and scripting, back-end technologies, database, and project management principles.

Faculty Contact
David Maier

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Faculty Contact Phone
313-845-9890

Faculty Contact Office Location
E-112

Academic Advisor
DeJanae Hayes

Academic Advisor Contact Email
dhayes8@hfcc.edu

Academic Advisor Contact Phone
313-845-9792

Academic Advisor Office Location
E-211C

School
Business, Entrepreneurship, PD

Academic Department
Computer Technology

Program Learning Outcomes

- Explain the client-server model of web development.
- Implement HTML, CSS, and JavaScript in static and dynamic, client-side pages.
- Develop and publish a web site utilizing web authoring and content management software.
- Use a client-side web framework to create a web site.
- Use a server-side web framework / web application framework to create a web site.
- Interface with the Unix/Linux operating system, including the vi editor, file management, and shell scripting.
- Design and create a database-backed website.
- Analyze, design, and implement an information system.
- Create and deliver a professional team presentation.

What Classes do I take?

2-Year Plan
Computer Information Systems: Web Development - AAS: Recommended Sequence - Current
Total Credits
61 - 65
Description
Enrollment Status: Full Time

If you have questions about the order in which you should take these courses, or the availability of these courses, please contact your advisor or the faculty contact listed below.

Program Contact Information

Office Contact: School of Business, Entrepreneurship, and Professional Development: 313-845-9645, bepdinfo@hfcc.edu, Technology Bldg, Room: E-211

Faculty Contact: David Maier: 313-845-9890, djmaier@hfcc.edu, Technology Bldg, Room: E-112

Academic Advisor: DeJanae Hayes: 313-845-9792, dhayes8@hfcc.edu, Technology Bldg, Room: E-211C

For students in an older version of this program, please visit Henry Ford College Catalog Archive to view required courses.

Year	Semester	Semester Credits
Year 1	Fall	13

Courses
- CIS100 - Introduction to Information Technology

Semester Credits	3
Contact Hours	47

Courses
- CIS122 - Web Internet Technologies

Semester Credits	3
Contact Hours	62

Courses
- CIS125 - Principles of Programming Logic

Semester Credits	4
Contact Hours	62

Courses
- ENG131 - Introduction to College Writing

Semester Credits
3
Contact Hours
47

Year	Semester	Semester Credits
Year 1	Winter	14 - 17

Courses
- CIS111 - SQL for Database Development

Semester Credits
3
Contact Hours
62

Courses
- CIS126 - HTML/CSS Web Programming

Semester Credits
4
Contact Hours
62

Courses
- CIS129 - Intro to UNIX With Shell Scripting

Semester Credits
4
Contact Hours
62

Courses
- CIS119 - Math for Computer Professional
  OR
- MATH115 - College Algebra
  OR
- MATH131 - Mathematics for the Modern World
  OR
- MATH141 - Introduction to Statistics
  OR
- MATH165 - Mathematics for Calculus
  OR
- MATH175 - Precalculus
  OR
- MATH180 - Calculus I
  OR
- MATH183 - Calculus II
  OR
- MATH275 - Discrete Mathematics
  OR
- MATH280 - Calculus III
  OR
- MATH283 - Linear Algebra
  OR
- MATH288 - Differential Equations

Semester Credits
3 - 6
Contact Hours
62 - 92

Year	Semester	Semester Credits
Year 1	Summer	5

Courses
- ART107 - Photoshop

Semester Credits
3
Contact Hours
47

Courses
- CIS211 - Web Server Administration

Semester Credits
2
Contact Hours
32

Year	Semester	Semester Credits
Year 2	Fall	16

Courses
- CIS112 - Introduction to Networking

Semester Credits
3
Contact Hours
47

Courses
- CIS130 - C# Programming

Semester Credits
3
Contact Hours
62

Courses
- CIS172 - JavaScript

Semester Credits
3
Contact Hours
62

Courses
- CIS227 - Content Management Systems

Semester Credits 4
Contact Hours 62

Courses
- Gen Ed - 3 hrs - 2025

Semester Credits 3
Contact Hours 47

Year	Semester	Semester Credits
Year 2	Winter	13 - 14

Courses
- CIS222 - Web Database Development with PHP

Semester Credits 4
Contact Hours 62

Courses
- CIS225 - Web Frameworks

Semester Credits 3
Contact Hours 62

Courses
- CIS294 - Software Engineering

Semester Credits 3
Contact Hours 47

Courses
- ART245 - Interactive Experience Design
  OR
- CIS171 - Java Programming
  OR
- CIS190 - Co-op in Computer Information Systems
  OR
- CIS232 - Advanced C# Database Programming
  OR
- CIS290 - Co-op in Computer Information Systems
  OR
- CIS297 - Spec Topics in Comp Information Systems
  OR
- CIS298 - Spec Topics in Comp Information Systems
  OR
- CIS299 - Spec Topics in Comp Info Systems

Semester Credits 3 - 4
Contact Hours 3 - 150

Program Requirements

Minimum Credits for Program Completion
60
Minimum GPA required for Graduation
2.000
HFC Credit Hour Residency Requirement
20

Simple Requisites

Core Course Requirements

Computer Information Systems - Web Development AAS - Core Course Requirements
Type
Completion Requirement

Complete ALL of the following Courses:
- ART107-Photoshop 3 credits
- CIS100-Intro Info Tech 3 credits
- CIS111-SQL for Database Development 3 credits
- CIS112-Intro to Networking 3 credits
- CIS122-Web Internet Technologies 3 credits
- CIS125-Prin of Programming Logic 4 credits
- CIS126-HTML/CSS Web Programming 4 credits
- CIS129-Intro to UNIX Shell Script 4 credits
- CIS130-C# Programming 3 credits
- CIS172-JavaScript 3 credits
- CIS222-Web Database Dev with PHP 4 credits
- CIS294-Software Engineering 3 credits

Support Course Requirements

Computer Information Systems - Web Development AAS - Support Course Requirements
Type
Completion Requirement

Category 1: English Composition

Complete ALL of the following Courses:
- ENG131-Introduction College Writing 3 credits

Web Development

Complete at least 2 of the following courses:
- **OR** CIS225-Web Frameworks 3 credits
  OR CIS227-Content Management Systems 4 credits
  OR CIS232-Advanced C# Database Program 4 credits
  OR CIS141-Intro to Mobile App Developmen 2 credits
  OR CIS241-Adv Mobile App Dev (Android) 3 credits
  OR CIS243-Advanced Mobile App Dev (iOS) 3 credits

Category 3: Mathematics

Complete at least 1 of the following courses:
- CIS119-Math for Computer Professional 3 credits
  OR MATH115-College Algebra 5 credits
  OR MATH131-Math for the Modern World 4 credits
  OR MATH141-Introduction to Statistics 4 credits
  OR
  OR MATH165-Mathematics for Calculus 6 credits
  OR MATH175-Precalculus 5 credits
  OR MATH180-Calculus 1 5 credits
  OR MATH183-Calculus II 5 credits

OR MATH275-Discrete Mathematics 4 credits
OR MATH280-Calculus III 5 credits
OR MATH283-Linear Algebra 3 credits
OR MATH288-Differential Equations 5 credits

Complete additional 100-level, or higher, credits to complete this degree.

Earn at least 6 credits

General Education Requirements

Computer Information Systems - Web Development AAS - General Education Requirements
Type
Completion Requirement

Category 7: General Education

Earn at least 3 credits from the following:

- Gen Ed - 3 hrs - 2025

Additional Comments:
See General Education Requirements for Applied Degrees for details.

CIVILENGINTECH.AAS - Civil Engineering Technology

Program Information

Program Title
Civil Engineering Technology

Program Code
CIVILENGINTECH.AAS

Degree Type
Associate in Applied Science

Minimum Credits for Program Completion
60

Program Eligible for Financial Aid?
Yes

Subject
Architecture/Construction Tech

Semesters to Complete Program
4

Program Description
The Associate of Civil Technology Program is a hands on, lab based program, designed to give students skills and knowledge necessary to work as civil engineering technicians in areas involving drafting, construction, estimating, and surveying. In this program, students will learn to assist with the design and construction of highways, buildings, and other infrastructures.

Faculty Contact
Chad Richert

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Faculty Contact Phone
313-317-1515

Faculty Contact Office Location
E-115C

Academic Advisor
Rachel Vanzutphen

Academic Advisor Contact Email
rvanzutphen@hfcc.edu

Academic Advisor Contact Phone
313-845-9873

Academic Advisor Office Location
E-211L

School
Business, Entrepreneurship, PD

Academic Department
Building Sciences

Program Learning Outcomes

Utilize principles, hardware, and software that are appropriate to produce drawings, reports, quantity estimates, and other documents related to design and construction.

Perform economic analyses and cost estimates related to design, construction, operations and maintenance of systems associated with civil technology.

Select appropriate construction related materials and practices.

Perform standard analysis and design related to civil technology.

Utilize surveying methods appropriate for land measurement and/or construction layout.

Conduct standardized field and laboratory tests related to civil engineering.

What Classes do I take?

2-Year Plan
Civil Engineering Technology - AAS: Recommended Sequence - Current
Total Credits
60 - 62
Description
Enrollment Status: Full Time

If you have questions about the order in which you should take these courses, or the availability of these courses, please contact your advisor or the faculty contact listed below.

Program Contact Information

Office Contact: School of Business, Entrepreneurship, and Professional Development: 313-845-9645, bepdinfo@hfcc.edu, Technology Bldg, Room: E-211

Faculty Contact: Chad Richert: 313-317-1515, crichert@hfcc.edu, Technology Bldg, Room: E-115C

Academic Advisor: Rachel Vanzutphen: 313-845-9873, rvanzutphen@hfcc.edu, Technology Bldg, Room: E-211L

For students in an older version of this program, please visit Henry Ford College Catalog Archive to view required courses.

Year	Semester	Semester Credits
Year 1	Fall	15

Courses
- BLDA100 - Introduction to Autocad

Semester Credits 4
Contact Hours 77

Courses
- BLDA120 - Introduction to Carpentry

Semester Credits 4
Contact Hours 77

Courses
- GEOL131 - Physical Geology

Semester Credits 4
Contact Hours 77

Courses
- Computer Technology - 2020

Semester Credits 3
Contact Hours 47

Year	Semester	Semester Credits
Year 1	Winter	16 - 18

Courses
- BLDA140 - Construction Systems 1

Semester Credits
4
Contact Hours
77

Courses
- BLDA135 - Soils and Foundations

Semester Credits
4
Contact Hours
77

Courses
- CHEM131 - Principles of Chemistry

Semester Credits
4
Contact Hours
77

Courses
- MATH110 - Intermediate Algebra
  OR
- MATH115 - College Algebra
  OR
- MATH165 - Mathematics for Calculus
  OR
- MATH175 - Precalculus
  OR
- MATH180 - Calculus I
  OR
- MATH183 - Calculus II
  OR
- MATH275 - Discrete Mathematics
  OR
- MATH280 - Calculus III
  OR
- MATH288 - Differential Equations

Semester Credits
4 - 6
Contact Hours
62 - 92

Year	Semester	Semester Credits
Year 2	Fall	15

Courses
- BLDA240 - Construction Systems 2

Semester Credits
4
Contact Hours
77

Courses
- BLDA250 - Surveying & Site Design

Semester Credits
4
Contact Hours
77

Courses
- BLDA265 - Civil Technology Studio

Semester Credits
4
Contact Hours
77

Courses
- ENGT245 - Applied Statics

Semester Credits
3
Contact Hours
62

Year	Semester	Semester Credits
Year 2	Winter	14

Courses
- BLDA260 - Construction Estimating

Semester Credits
4
Contact Hours
77

Courses
- BLDA280 - Bldg Science Capstone

Semester Credits
4
Contact Hours
77

Courses
- ENGR201 - Science of Materials

Semester Credits
3
Contact Hours
47

Courses
- CAT1 - Gen Ed Transfer - 2020

Semester Credits 3
Contact Hours 47

Program Requirements

Minimum Credits for Program Completion
60
Minimum GPA required for Graduation
2.000
HFC Credit Hour Residency Requirement
20

Simple Requisites

Core Course Requirements

Civil Engineering Technology AAS - Core Course Requirements
Type
Completion Requirement

Complete ALL of the following Courses:
- ENGR201-Science of Materials 3 credits
- ENGT245-Applied Statics 3 credits
- GEOL131-Physical Geology 4 credits
- CHEM131-Principles of Chemistry 4 credits
- BLDA100-Introduction to Autocad 4 credits
- BLDA120-Introduction to Carpentry 4 credits
- BLDA135-Soils and Foundations 4 credits
- BLDA140-Construction Systems 1 4 credits
- BLDA240-Construction Systems 2 4 credits
- BLDA250-Surveying & Site Design 4 credits
- BLDA260-Construction Estimating 4 credits
- BLDA265-Civil Technology Studio 4 credits
- BLDA280-Bldg Science Capstone 4 credits

Category 3: Mathematics

Complete at least 1 of the following courses:
- **OR** MATH110-Intermediate Algebra 4 credits
  OR MATH115-College Algebra 5 credits
  OR MATH165-Mathematics for Calculus 6 credits
  OR MATH175-Precalculus 5 credits
  OR MATH180-Calculus 1 5 credits
  OR MATH183-Calculus II 5 credits
  OR MATH275-Discrete Mathematics 4 credits
  OR MATH280-Calculus III 5 credits
  OR MATH288-Differential Equations 5 credits

General Education Requirements

Civil Engineering Technology AAS - General Education Course Requirements
Type
Completion Requirement

Category 1: English Composition

Complete at least 1 courses in the following course sets:
- CAT1 - Gen Ed Applied - 2020

Additional Comments:
See General Education Requirements for Applied Degrees for details.

Degree Specific Requirements

Civil Engineering Technology AAS - Degree Specific Program Requirements
Type
Completion Requirement

Computer Technology

Complete at least 1 courses in the following course sets:
- Computer Technology - 2020

Additional Comments:
See Degree Specific Requirements for details.

CNCAD.CA - Advanced Machine Tool Technology / CNC

Program Information

Program Title
Advanced Machine Tool Technology/CNC Certificate

Program Code
CNCAD.CA

Degree Type
Certificate of Achievement

Minimum Credits for Program Completion
24

Program Eligible for Financial Aid?
Yes

Subject
Machine Tool Technology

Semesters to Complete Program
4

Program Description
Provides students with the opportunity to improve and build on current skills and knowledge of CNC. Students receive training on the latest equipment used in the modern business environment, and successful students have the opportunity to develop an advanced-level of proficiency in the use and application of CNC equipment.

Faculty Contact	Faculty Contact Email	Faculty Contact Phone	Faculty Contact Office Location
Guy Pizzino	gpizzino@hfcc.edu	313-845-6331	E-117B

Academic Advisor	Academic Advisor Contact Email	Academic Advisor Contact Phone	Academic Advisor Office Location
Rachel Vanzutphen	rvanzutphen@hfcc.edu	313-845-9873	E-211L

School
Business, Entrepreneurship, PD

Academic Department
Advanced Manufacturing

Program Learning Outcomes

- Develop knowledge of career opportunities and demonstrate the requisite entry level machining and measurement skills for the Manufacturing Industry.
- Practice safe work habits in an industrial manufacturing environment.
- Create a basic or complex part on non-computerized industry standard machining and turning equipment.
- Create complete complex parts on computer controlled machining centers.
- Create complete complex parts on computer controlled turning centers.
- Utilize quality control concepts to identify root cause part discrepancies.
- Synthesize information using numerical control software to complete three-dimensional parts on computer controlled milling and turning centers.

What Classes do I take?

2-Year Plan
Advanced Machine Tool Technology/CNC - CA: Recommended Sequence - Current
Total Credits
24
Description
Enrollment Status: Full Time

If you have questions about the order in which you should take these courses, or the availability of these courses, please contact your advisor or the faculty contact listed below.

Program Contact Information

Office Contact: School of Business, Entrepreneurship, and Professional Development: 313-845-9645, bepdinfo@hfcc.edu, Technology Bldg, Room: E-211

Faculty Contact: Guy Pizzino: 313-845-6331, gpizzino@hfcc.edu, Technology Bldg, Room: E-117B

Academic Advisor: Rachel Vanzutphen: 313-845-9873, rvanzutphen@hfcc.edu, Technology Bldg, Room: E-211L

For students in an older version of this program, please visit Henry Ford College Catalog Archive to view required courses.

Year	Semester	Semester Credits
Year 1	Fall	7

Courses
- MTT100 - Machine Tool Processes I

Semester Credits 4
Contact Hours 92

Courses
- MTT130 - Quality Control Gaging & Inspection

Semester Credits 3
Contact Hours 62

Year	Semester	Semester Credits
Year 1	Winter	3

Courses
- MTT140 - Introduction to CNC

Semester Credits 3
Contact Hours 62

Year	Semester	Semester Credits
Year 2	Fall	6

Courses
- MTT145 - CNC Operations

Semester Credits 4
Contact Hours 92

Courses
- MTT146 - Introduction to Machine Tool Probing

Semester Credits 1
Contact Hours 16

Courses
- MTT147 - Basic Macro Programming for CNC

Semester Credits 1
Contact Hours 24

Year	Semester	Semester Credits
Year 2	Winter	8

Courses
- MTT148 - Advanced CNC Probing

Semester Credits 1
Contact Hours 16

Courses
- MTT150 - Statistical Process Ctrl (SPC) in Manf

Semester Credits 3
Contact Hours 62

Courses
- MTT275 - Advanced CNC Operations

Semester Credits 4
Contact Hours 92

Program Requirements

Minimum Credits for Program Completion	Minimum GPA required for Graduation	HFC Credit Hour Residency Requirement
24	2.000	20

Simple Requisites

Core Course Requirements

Advanced Machine Tool Technology / CNC CA - Core Course Requirements
Type
Completion Requirement

Complete ALL of the following Courses:
- MTT100-Machine Tool Processes I 4 credits
- MTT130-Quality Cont Gaging & Inspecti 3 credits
- MTT140-Introduction to CNC 3 credits
- MTT145-CNC Operations 4 credits
- MTT146-Introd to Machine Tool Probing 1 credits
- MTT147-Basic Macro Programmi for CNC 1 credits
- MTT148-Advanced CNC Probing 1 credits
- MTT150-Statistical Proc Ctrl in Manf 3 credits
- MTT275-Advanced CNC Operations 4 credits

COMPNET.CA - Computer Networking Academy - CCNA

Program Information

Program Title
Computer Networking Academy - CCNA Certificate

Program Code
COMPNET.CA

Degree Type
Certificate of Achievement

Minimum Credits for Program Completion
16

Program Eligible for Financial Aid?
Yes

Subject
CISCO Academy

Semesters to Complete Program
2

Program Description
Provides students with the skills for designing, building, and maintaining computer networks. Prepares students for Cisco Certified Entry Networking Technician (CCENT) and Cisco Certified Network Associate (CCNA) industry certifications. Cisco certifications are consistently rated among the most highly valued certifications within the IT industry by both employers and IT professionals. The CCNA certificate program consists of four courses and is designed to be completed within one year. Students learn how to install and configure Cisco routers and switches in multi-protocol local and wide area networks, perform basic troubleshooting and improve network performance and security. The CCNA courses are also part of the required core courses for the Associate of Applied Science in Computer Information Systems - Network Administration and are electives for the Associate of Applied Science in Computer Information Systems - Information Assurance.

Program Accreditation Information
The College's Computer Networking Academy is Cisco-approved.

Faculty Contact
Todd Browning

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Faculty Contact Phone
313-845-6365

Faculty Contact Office Location
E-115B

Academic Advisor
DeJanae Hayes

Academic Advisor Contact Email
dhayes8@hfcc.edu

Academic Advisor Contact Phone
313-845-9792

Academic Advisor Office Location
E-211C

School
Business, Entrepreneurship, PD

Academic Department
Computer Technology

Program Learning Outcomes

Design, implement and document a comprehensive network environment.

Install, configure and troubleshoot network devices.

What Classes do I take?

2-Year Plan
Computer Networking Academy: CCNA - CA: Recommended Sequence - Current
Total Credits
16
Description
Enrollment Status: Full Time

If you have questions about the order in which you should take these courses, or the availability of these courses, please contact your advisor or the faculty contact listed below.

Program Contact Information

Office Contact: School of Business, Entrepreneurship, and Professional Development: 313-845-9645, bepdinfo@hfcc.edu, Technology Bldg, Room: E-211

Faculty Contact: Todd Browning: 313-845-6365, browning@hfcc.edu, Technology Bldg, Room: E-115B

Academic Advisor: DeJanae Hayes: 313-845-9792, dhayes8@hfcc.edu, Technology Bldg, Room: E-211C

For students in an older version of this program, please visit Henry Ford College Catalog Archive to view required courses.

Year	Semester	Semester Credits
Year 1	Fall	8

Courses
- CNT110 - CCNA: Networking I

Semester Credits
4
Contact Hours
77

Courses
- CNT120 - CCNA: Networking II

Semester Credits
4
Contact Hours
77

Year	Semester	Semester Credits
Year 1	Winter	8

Courses
- CNT210 - CCNA: Networking III

Semester Credits
4
Contact Hours
77

Courses
- CNT220 - CCNA: Networking IV

Semester Credits
4
Contact Hours
77

Program Requirements

Minimum Credits for Program Completion
16

Minimum GPA required for Graduation
2.000

HFC Credit Hour Residency Requirement
20

Simple Requisites

Core Course Requirements

Computer Networking Academy - CCNA CA - Core Course Requirements
Type
Completion Requirement

Complete ALL of the following Courses:
- CNT110-CCNA: Networking I 4 credits
- CNT120-CCNA: Networking II 4 credits
- CNT210-CCNA: Networking III 4 credits
- CNT220-CCNA: Networking IV 4 credits

COMPSCIENCE.AS - Computer Science

Program Information

Program Title
Computer Science

Program Code
COMPSCIENCE.AS

Degree Type
Associate in Science

Minimum Credits for Program Completion
70

Program Eligible for Financial Aid?
Yes

Subject
Computer Information Systems

Semesters to Complete Program
6

Program Description
Computer Science is the study of computers and computational systems. Unlike electrical and computer engineers, computer scientists focus on software including their theory, design, development, and application. Our Computer Science program provides students with in-depth knowledge and skills in the field of computer science, including programming logic and algorithm design, software development using a variety of major modern languages, database systems, software engineering principles and methodologies, and security principles and methods. The program prepares students for both entry-level career opportunities and transfer opportunities to four-year universities. Students take core computer classes as well as the general education requirements and mathematics courses commonly required in Computer Science Bachelor degrees.

Faculty Contact
David Maier

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Faculty Contact Phone
313-845-9890

Faculty Contact Office Location
E-112

Academic Advisor
DeJanae Hayes

Academic Advisor Contact Email
dhayes8@hfcc.edu

Academic Advisor Contact Phone
313-845-9792

Academic Advisor Office Location
E-211C

School
Business, Entrepreneurship, PD

Academic Department
Computer Technology

Program Learning Outcomes

- Operate a personal computer and productivity software installed on it, including Microsoft Office, file management, the Internet/Web, e-mail, and input/output/storage devices.
- Explain the importance of personal responsibility and security in a technological world, including copyright laws, netiquette, ethics, privacy issues, and security threats.
- Design and implement a computer program in any of a number of modern computer languages to meet required specifications.
- Design, create and manipulate an enterprise-scale database system.
- Analyze, design, implement, test, debug and document software systems of varying complexity.
- Demonstrate proficiency in the mathematics utilized in computer science.
- Communicate effectively both orally and in writing to a diverse audience.

What Classes do I take?

2-Year Plan
Computer Science - AS: Recommended Sequence - Current
Total Credits
67 - 75
Description
If you have questions about the order in which you should take these courses, or the availability of these courses, please contact your advisor or the faculty contact listed below.

Program Contact Information

Office Contact: School of Business, Entrepreneurship, and Professional Development: 313-845-9645, bepdinfo@hfcc.edu, Technology Bldg, Room: E-211

Faculty Contact: David Maier: 313-845-9890, djmaier@hfcc.edu, Technology Bldg, Room: E-112

Academic Advisor: DeJanae Hayes: 313-845-9792, dhayes8@hfcc.edu, Technology Bldg, Room: E-211C

For students in an older version of this program, please visit Henry Ford College Catalog Archive to view required courses.

Year	Semester	Semester Credits
Year 1	Fall	14 - 16

Courses
- CIS100 - Introduction to Information Technology

Semester Credits 3
Contact Hours 47

Courses
- CIS125 - Principles of Programming Logic

Semester Credits 4
Contact Hours 62

Courses
- ENG131 - Introduction to College Writing
  OR
- ENG131A - Introduction to College Writing (ALP)
  OR
- ENG131E - Intro to College Writing (ALP) for ELLs
  OR
- ENG131H - Honors Introduction to College Writing

Semester Credits 3
Contact Hours 47

Courses
- MATH165 - Mathematics for Calculus
  OR
- MATH175 - Precalculus
  OR
- MATH180 - Calculus I
  OR
- MATH183 - Calculus II
  OR
- MATH275 - Discrete Mathematics

Semester Credits 4 - 6
Contact Hours 77 - 92

Year	Semester	Semester Credits
Year 1	Winter	13 - 15

Courses
- CIS111 - SQL for Database Development

Semester Credits 3
Contact Hours 62

Courses
- CIS122 - Web Internet Technologies

Semester Credits 3
Contact Hours 62

Courses
- CIS170 - C Programming

Semester Credits 3
Contact Hours 62

Courses
- MATH165 - Mathematics for Calculus
  OR
- MATH175 - Precalculus
  OR
- MATH180 - Calculus I
  OR
- MATH183 - Calculus II
  OR
- MATH275 - Discrete Mathematics

Semester Credits 4 - 6
Contact Hours 77 - 92

Year	Semester	Semester Credits
Year 1	Summer	6

Courses
- CAT5 - Gen Ed Transfer - 2025

Semester Credits 3
Contact Hours 47

Courses
- ENG132 - College Writing and Research
  OR
- ENG132H - Honors College Writing and Research
  OR
- ENG135 - Business & Technical Writing & Research

Semester Credits 3
Contact Hours 47

Year	Semester	Semester Credits
Year 2	Fall	16 - 18

Courses
- CIS130 - C# Programming

Semester Credits 3
Contact Hours 62

Courses
- CIS171 - Java Programming

Semester Credits 3
Contact Hours 62

Courses
- CAT6 - Transfer - Lec and Lab - 2025
  OR
- CAT6 - Transfer - Lec Only - 2020
  OR
- CAT6 - Gen Ed Transfer - Lab Only - 2020

Semester Credits 3 - 5
Contact Hours 47 - 107

Courses
- Select at least 7 credit hours from MATH or SCI courses (Generic)
  OR
- MATH275 - Discrete Mathematics
  OR
- MATH280 - Calculus III
  OR
- MATH283 - Linear Algebra
  OR
- CAT6 - Transfer - Lec and Lab - 2025
  OR
- CAT6 - Transfer - Lec Only - 2020
  OR
- CAT6 - Gen Ed Transfer - Lab Only - 2020

Semester Credits
7
Contact Hours
107

Year	Semester	Semester Credits
Year 2	Winter	15

Courses
- CIS230 - C++ Programming

Semester Credits
3
Contact Hours
62

Courses
- CIS294 - Software Engineering

Semester Credits
3
Contact Hours
47

Courses
- CAT4 - Gen Ed Transfer - 2020

Semester Credits
3
Contact Hours
47

Courses
- CAT4 - Gen Ed Transfer - 2020

Semester Credits
3
Contact Hours
47

Courses
- CAT5 - Gen Ed Transfer - 2025

Semester Credits
3
Contact Hours
47

Year	Semester	Semester Credits
Year 2	Summer	3 - 5

Courses
- CAT6 - Transfer - Lec and Lab - 2025
  OR
- CAT6 - Transfer - Lec Only - 2020
  OR
- CAT6 - Gen Ed Transfer - Lab Only - 2020

Semester Credits
3 - 5
Contact Hours
47 - 107

Program Requirements

Minimum Credits for Program Completion
67
Minimum GPA required for Graduation
2.000
HFC Credit Hour Residency Requirement
20

Simple Requisites

Core Course Requirements

Computer Science AS - Core Course Requirements
Type
Completion Requirement

Complete ALL of the following Courses:
- CIS100-Intro Info Tech 3 credits
- CIS111-SQL for Database Development 3 credits
- CIS122-Web Internet Technologies 3 credits
- CIS125-Prin of Programming Logic 4 credits
- CIS130-C# Programming 3 credits
- CIS170-C Programming 3 credits
- CIS171-Java Programming 3 credits
- CIS230-C++ Programming 3 credits
- CIS294-Software Engineering 3 credits

Support Course Requirements

Computer Science AS - Support Course Requirements
Type
Completion Requirement

Category 1: English Composition

Complete at least 1 of the following courses:
- ENG131-Introduction College Writing 3 credits
  OR ENG131A-Intro College Writing (ALP) 3 credits
  OR ENG131H-Honors Intro College Writing 3 credits

Category 2: English Composition or Communications

Complete at least 1 of the following courses:
- ENG132-College Writing and Research 3 credits
  OR ENG132H-Honors Coll Writing & Research 3 credits
  OR ENG135-Bus & Tech Writing & Research 3 credits

Choose two mathematics courses from the following options

Choose one of the following:
- Note: this is one option. Consult an Academic Advisor or Program Lead for more information.
  - MATH165 Mathematics for Calculus
  - MATH175 Precalculus
- **In addition to, or an alternative to MATH-165 or MATH-175, one or two of the following courses can be taken:**
  - MATH180 Calculus 1
  - MATH183 Calculus II
  - MATH275 Discrete Mathematics

Complete the course requirements within the following two pathways. Consult transfer university degree requirements or consult the program lead or academic advisor for more information.

Choose Additional Math or Science

In addition to the previous two Math courses taken, choose at least seven (7) credit hours of mathematics AND/OR science courses from the options below. Consult an Academic Advisor or Program Lead for more information.
- **Mathematics options:**
  - MATH275 Discrete Mathematics
  - MATH280 Calculus III
  - MATH283 Linear Algebra
- **Science options:**

  Choose any additional courses from the MTA Category 6: Natural Sciences list not taken to fulfill the basic MTA general educational requirements.

Earn at least 7 credits

General Education Requirements

Computer Science AS - General Education Course Requirements
Type
Completion Requirement

Category 4: Social Sciences

Complete any two, from different disciplines, from the General Education Requirements for Transfer Degrees (MTA) list.

Complete at least 2 courses in the following course sets:
- CAT4 - Gen Ed Transfer - 2020

Category 5: Humanities and Fine Arts

Complete any two, from different disciplines, from the General Education Requirements for Transfer Degrees (MTA) list.

Complete at least 2 courses in the following course sets:
- CAT5 - Gen Ed Transfer - 2025

Category 6: Natural Sciences

Complete any two, from different disciplines, from the General Education Requirements for Transfer Degrees (MTA) list.

Complete at least 2 courses in the following course sets:
- CAT6 - Transfer - Lec and Lab - 2025

Additional Comments:
See General Education Requirements for Transfer Degrees for details.

CULIN.AAS - Culinary Arts

Program Information

Program Title
Culinary Arts AAS Degree

Program Code
CULIN.AAS

Degree Type
Associate in Applied Science

Minimum Credits for Program Completion
71

Program Eligible for Financial Aid?
Yes

Subject
Culinary Arts, Hospitality Mgm

Semesters to Complete Program
5

Program Description
Provides opportunities for students to build character, leadership, and technical skills that are necessary for success in the global industry of hospitality and tourism. For a four-year degree in Hospitality Management, continue in Henry Ford College s Bachelor of Science in Culinary Arts degree.

Program Accreditation Information
The Culinary Arts Associate in Applied Science is accredited by the American Culinary Federation Education Foundation Accrediting Commission (ACFEFAC). The department has also earned the Exemplary Program Award symbolizing the highest educational standards recognized by the ACFEFAC. The award is presented to programs that have proven consistent compliance with all ACFEFAC accreditation requirements, along with excellent management of the program. ACFEFAC is recognized by the Council on Higher Education Accreditation (CHEA).

Instructors receive training and certifications from the American Hotel & Lodging Educational Institute, The National Restaurant Association Educational Foundation, the Federation of Dining Room Professionals and the American Culinary Federation.

Faculty Contact	Faculty Contact Email	Faculty Contact Phone	Faculty Contact Office Location
Eric Gackenbach	epgackenbach@hfcc.edu	313-317-1572	N-155B

Academic Advisor	Academic Advisor Contact Email	Academic Advisor Contact Phone	Academic Advisor Office Location
Ashlei Chears	achears@hfcc.edu	313-845-6486	E-211H

School
Business, Entrepreneurship, PD

Academic Department
Culinary Arts + Hospitality Management

Admissions Requirements

Admissions Requirements
Additional Program Requirements

Official HFC chef's uniform required to be purchased prior to beginning classes for culinary lab courses - contact department on process to order uniforms. Visit the Hospitality Department in M-163 in the Culinary Arts & Student Center building, or online at https://culinary.hfcc.edu/ for uniform ordering information.

Program Learning Outcomes

- Execute a menu from start to finish in compliance with ACF category F and G standards for edible hot and cold food.
- Relate restaurant operations and scenarios to FDRP standards and procedures.
- Based on MLCC and MRA standards, assess when and how beer, wine and spirits are served in a licensed establishment.
- Based on NRA standards, decide how to handle various types of food in order to prevent food borne illness.
- Incorporate professional work behaviors to complete 300 hours of supervised internship.
- Organize examples of various segments (Non-Commercial, Lodging, Sports & Leisure, Restaurant, Casino) and job opportunities in the Hospitality Industry.

What Classes do I take?

2-Year Plan
Culinary Arts - AAS: Recommended Sequence - Current
Total Credits
72
Description
Enrollment Status: Full Time

If you have questions about the order in which you should take these courses, or the availability of these courses, please contact your advisor or the faculty contact listed below.

Program Contact Information

Office Contact: School of Business, Entrepreneurship, and Professional Development: 313-845-9645, bepdinfo@hfcc.edu, Technology Bldg, Room: E-211

Faculty Contact: Eric Gackenbach: 313-317-1572, epgackenbach@hfcc.edu, Campus Safety, Room: N-155B

Academic Advisor: Ashlei Chears: 313-845-6486, achears@hfcc.edu, Technology Bldg, Room: E-211H

For students in an older version of this program, please visit Henry Ford College Catalog Archive to view required courses.

Year	Semester	Semester Credits
Year 1	Fall	14

Courses
- HOSP105 - Applied Food Service Sanitation

Semester Credits 2
Contact Hours 32

Courses
- HOSP220 - Introduction to Baking and Cooking

Semester Credits 2
Contact Hours 32

Courses
- HOSP224 - Culinary Skills and Nutritional Cooking

Semester Credits 3
Contact Hours 69.5

Courses
- HOSP226 - Fundamentals of Baking

Semester Credits 3
Contact Hours 69.5

Courses
- MATH104 - Mathematics for Food Service Careers

Semester Credits 4
Contact Hours 62

Year	Semester	Semester Credits
Year 1	Winter	17

Courses
- HOSP211 - Introduction to the Hospitality Industry

Semester Credits 3
Contact Hours 47

Courses
- HOSP340 - A'la Carte and Buffet Cookery

Semester Credits 8
Contact Hours 152

Courses
- ENG131 - Introduction to College Writing

Semester Credits 3
Contact Hours 47

Courses
- CIS100 - Introduction to Information Technology

Semester Credits 3
Contact Hours 47

Year	Semester	Semester Credits
Year 1	Summer	11

Courses
- HOSP290 - Co-op in Hospitality

Semester Credits 2
Contact Hours 3 - 300

Courses
- ENG132 - College Writing and Research
  OR
- ENG132H - Honors College Writing and Research
  OR
- ENG135 - Business & Technical Writing & Research

Semester Credits 3
Contact Hours 47

Courses
- Hospitality Support: Complete 6 credits (Generic)
  OR
- HOSP101 - Wines of the World
  OR
- HOSP103 - Major Wines Grape Varieties
  OR
- HOSP107 - Artisanal Cheese and Craft Beer
  OR
- HOSP145 - Ice Carving and Design
  OR
- HOSP215 - International Cooking
  OR
- HOSP221 - Front Office Procedures & Guest Service
  OR
- HOSP235 - Ice Carving for the Professional
  OR
- HOSP245 - Hotel and Restaurant Desserts
  OR
- HOSP250 - Hospitality and Travel Marketing
  OR
- HOSP255 - Professional Cake Decorating
  OR
- HOSP270 - Facilities Management
  OR
- HOSP309 - Meetings and Event Planning
  OR
- HOSP325 - Dining Room Captain

Semester Credits 6
Contact Hours 94

Year	Semester	Semester Credits
Year 2	Fall	15

Courses
- HOSP251 - Dining Room Service and Operations

Semester Credits 3
Contact Hours 62

Courses
- HOSP310 - Hospitality Supervision and Leadership

Semester Credits 3
Contact Hours 47

Courses
- HOSP331 - Modern and European Pastry

Semester Credits
6
Contact Hours
107

Courses
- POLS131 - Intro to American Gov't & Politi Science

Semester Credits
3
Contact Hours
47

Year	Semester	Semester Credits
Year 2	Winter	15

Courses
- HOSP330 - Food and Nutrition

Semester Credits
3
Contact Hours
47

Courses
- HOSP341 - Garde Manger & Menu Planning

Semester Credits
6
Contact Hours
107

Courses
- HOSP360 - Hospitality Purchasing

Semester Credits
3
Contact Hours
47

Courses
- HOSP370 - Food and Beverage Controls

Semester Credits
3
Contact Hours
47

Program Requirements

Minimum Credits for Program Completion
71

Minimum GPA required for Graduation
2.000

HFC Credit Hour Residency Requirement
20

Simple Requisites

Core Course Requirements

Culinary Arts AAS - Core Course Requirements
Type
Completion Requirement

Complete ALL of the following Courses:
- HOSP105-Applied Food Serv Sanitation 2 credits
- HOSP211-Intro to Hospitality Industry 3 credits
- HOSP220-Intro to Baking & Cooking 2 credits
- HOSP224-Culinary Skills & Nutritional 3 credits
- HOSP226-Fundamentals of Baking 3 credits
- HOSP251-Dining Room Service & Operati 3 credits
- HOSP310-Hosp Supervision & Leadership 3 credits
- HOSP330-Food and Nutrition 3 credits
- HOSP331-Modern and European Pastry 6 credits
- HOSP340-A'la Carte and Buffet Cookery 8 credits
- HOSP341-Garde Manger and Menu Planning 6 credits
- HOSP360-Hospitality Purchasing 3 credits
- HOSP370-Food and Beverage Controls 3 credits

Hospitality Co-Op

Earn at least 2 credits from the following:
- HOSP190-Co-op in Hospitality 1 credits
  OR HOSP290-Co-op in Hospitality 2 credits

Support Course Requirements

Culinary Arts AAS - Support Course Requirements
Type
Completion Requirement

Earn at least 6 credits from the following:
- HOSP101-Wines of the World 1 credits
  OR HOSP103-Maj Wine Grape Var 1 credits
  OR HOSP107-Artisanal Cheese & Craft Beer 1 credits
  OR HOSP145-Ice Carving and Design 3 credits
  OR HOSP215-International Cooking 4 credits
  OR HOSP221-Front Office Procedures 3 credits
  OR HOSP235-Ice Carving for Professional 3 credits
  OR HOSP245-Hotel & Rest Desserts 3 credits
  OR HOSP250-Hospitality & Travel Marketing 3 credits
  OR HOSP255-Professional Cake Decorating 3 credits
  OR HOSP270-Facilities Management 3 credits
  OR HOSP309-Meetings and Event Planning 3 credits
  OR HOSP325-Dining Room Captain 3 credits

Category 1: English Composition

Complete ALL of the following Courses:
- ENG131-Introduction College Writing 3 credits

Category 2: English Composition or Communication

Complete at least 1 of the following courses:
- ENG132-College Writing and Research 3 credits
  OR ENG132H-Honors Coll Writing & Research 3 credits
  OR ENG135-Bus & Tech Writing & Research 3 credits

Computer Technology

Complete ALL of the following Courses:
- CIS100-Intro Info Tech 3 credits

Category 3: Mathematics

Complete at least 1 of the following courses:
- BMA110-Business Math 3 credits
  OR MATH104-Math for Food Service Careers 4 credits
  OR
  OR MATH110-Intermediate Algebra 4 credits

General Education Requirements

Culinary Arts AAS - General Education Course Requirements
Type
Completion Requirement

Category 7: General Education

See General Education Requirements for Applied Degrees for details.

Earn at least 3 credits from the following:
- Gen Ed - 3 hrs - 2025

Additional Comments:
See General Education Requirements for Applied Degrees for details.

CULIN.BS - Culinary Arts

Program Information

Program Title
Culinary Arts BS Degree

Program Code
CULIN.BS

Degree Type
Bachelor of Science

Minimum Credits for Program Completion
120

Program Eligible for Financial Aid?
Yes

Subject
Culinary Arts, Hospitality Mgm

Semesters to Complete Program
9

Program Description
Provides opportunities for students to build character, leadership, and technical skills that are necessary for success in the global industry of hospitality and tourism. Builds on Henry Ford s ACFEF-accredited Culinary Arts associate degree and Hotel/Restaurant Management associate degree.

Program Accreditation Information
The Culinary Arts Associate in Applied Science is accredited by the American Culinary Federation Education Foundation Accrediting Commission (ACFEFAC). The department has also earned the Exemplary Program Award symbolizing the highest educational standards recognized by the ACFEFAC. The award is presented to programs that have proven consistent compliance with all ACFEFAC accreditation requirements, along with excellent management of the program. ACFEFAC is recognized by the Council on Higher Education Accreditation (CHEA).

Courses in the Hospitality Management curriculum are supported by materials and certification exams from the American Hotel & Lodging Educational Institute, National Restaurant Association Educational Foundation, and Federation of Dining Room Professionals.

Instructors receive training and certifications from the American Hotel & Lodging Educational Institute, The National Restaurant Association Educational Foundation, the Federation of Dining Room Professionals and the American Culinary Federation.

Faculty Contact
Eric Gackenbach

Faculty Contact Email
epgackenbach@hfcc.edu

Faculty Contact Phone
313-317-1572

Faculty Contact Office Location
N-155B

Academic Advisor
Ashlei Chears

Academic Advisor Contact Email
achears@hfcc.edu

Academic Advisor Contact Phone
313-845-6486

Academic Advisor Office Location
E-211H

School
Business, Entrepreneurship, PD

Academic Department
Culinary Arts + Hospitality Management

Admissions Requirements

Admissions Requirements
Additional Program Requirements

Official HFC chef's uniform required to be purchased prior to beginning classes for culinary lab courses - contact department on process to order uniforms. Visit the Hospitality Department in M-163 in the Culinary Arts & Student Center building, or online at https://culinary.hfcc.edu/ for uniform ordering information.

Program Learning Outcomes

- Execute a menu from start to finish in compliance with ACF category F and G standards for edible hot and cold food.
- Relate restaurant operations and scenarios to FDRP standards and procedures.
- Based on MLCC and MRA standards, assess when and how beer, wine and spirits are served in a licensed establishment.
- Based on NRA standards, decide how to handle various types of food in order to prevent foodborne illness.
- Incorporate professional work behaviors to complete 300 hours of supervised internship.
- Organize examples of various segments (Non-Commercial, Lodging, Sports & Leisure, Restaurant, Casino) and job opportunities in the Hospitality Industry.
- Combine principles of Management, Marketing, Accounting, Finance and Economics as they relate to decision making in the Hospitality Industry.

What Classes do I take?

2-Year Plan
Culinary Arts - BS: Recommended Sequence - Current
Total Credits
120
Description
Enrollment Status: Full Time

Hospitality Studies Department Chair approval required for admission to this program of study.
For the planning of semesters six through 10, meet with a faculty advisor in the Hospitality Studies Department.

If you have questions about the order in which you should take these courses, or the availability of these courses, please contact your advisor or the faculty contact listed below.

Program Contact Information

Office Contact: School of Business, Entrepreneurship, and Professional Development: 313-845-9645, bepdinfo@hfcc.edu, Technology Bldg, Room: E-211

Faculty Contact: Eric Gackenbach: 313-317-1572, epgackenbach@hfcc.edu, Campus Safety, Room: N-155B

Academic Advisor: Ashlei Chears: 313-845-6486, achears@hfcc.edu, Technology Bldg, Room: E-211H

For students in an older version of this program, please visit Henry Ford College Catalog Archive to view required courses.

Year	Semester	Semester Credits
Year 1	Fall	14

Courses
- HOSP105 - Applied Food Service Sanitation

Semester Credits 2
Contact Hours 32

Courses
- HOSP220 - Introduction to Baking and Cooking

Semester Credits 2
Contact Hours 32

Courses
- HOSP224 - Culinary Skills and Nutritional Cooking

Semester Credits 3
Contact Hours 69.5

Courses
- HOSP226 - Fundamentals of Baking

Semester Credits 3
Contact Hours 69.5

Courses
- MATH104 - Mathematics for Food Service Careers

Semester Credits 4
Contact Hours 62

Year	Semester	Semester Credits
Year 1	Winter	17

Courses
- HOSP211 - Introduction to the Hospitality Industry

Semester Credits 3
Contact Hours 47

Courses
- HOSP340 - A'la Carte and Buffet Cookery

Semester Credits 8
Contact Hours 152

Courses
- CIS100 - Introduction to Information Technology

Semester Credits 3
Contact Hours 47

Courses
- ENG131 - Introduction to College Writing

Semester Credits 3
Contact Hours 47

Year	Semester	Semester Credits
Year 1	Summer	11

Courses
- HOSP290 - Co-op in Hospitality

Semester Credits 2
Contact Hours 3 - 300

Courses
- ENG132 - College Writing and Research
  OR
- ENG132H - Honors College Writing and Research
  OR
- ENG135 - Business & Technical Writing & Research

Semester Credits 3
Contact Hours 47

Courses
- Hospitality Support: Complete 6 credits (Generic)
  OR
- HOSP101 - Wines of the World
  OR
- HOSP103 - Major Wines Grape Varieties
  OR
- HOSP107 - Artisanal Cheese and Craft Beer
  OR
- HOSP145 - Ice Carving and Design
  OR
- HOSP215 - International Cooking
  OR
- HOSP221 - Front Office Procedures & Guest Service
  OR
- HOSP235 - Ice Carving for the Professional
  OR
- HOSP245 - Hotel and Restaurant Desserts
  OR
- HOSP250 - Hospitality and Travel Marketing
  OR
- HOSP255 - Professional Cake Decorating
  OR
- HOSP270 - Facilities Management

Semester Credits 6
Contact Hours 94

Year	Semester	Semester Credits
Year 2	Fall	15

Courses
- HOSP251 - Dining Room Service and Operations

Semester Credits 3
Contact Hours 62

Courses
- HOSP310 - Hospitality Supervision and Leadership

Semester Credits
3
Contact Hours
47

Courses
- HOSP331 - Modern and European Pastry

Semester Credits
6
Contact Hours
107

Courses
- POLS131 - Intro to American Gov't & Politi Science

Semester Credits
3
Contact Hours
47

Year	Semester	Semester Credits
Year 2	Winter	15

Courses
- HOSP330 - Food and Nutrition

Semester Credits
3
Contact Hours
47

Courses
- HOSP341 - Garde Manger & Menu Planning

Semester Credits
6
Contact Hours
107

Courses
- HOSP360 - Hospitality Purchasing

Semester Credits
3
Contact Hours
47

Courses
- HOSP370 - Food and Beverage Controls

Semester Credits
3
Contact Hours
47

Year	Semester	Semester Credits
Year 3	Fall	12

Courses
- Hospitality Studies Department Chair approval required for admission to this program of study. For the planning of semesters six through 10, meet with a faculty advisor in the Hospitality Studies Department. (Generic)

Semester Credits
12
Contact Hours
188

Year	Semester	Semester Credits
Year 3	Winter	12

Courses
- Hospitality Studies Department Chair approval required for admission to this program of study. For the planning of semesters six through 10, meet with a faculty advisor in the Hospitality Studies Department. (Generic)

Semester Credits
12
Contact Hours
188

Year	Semester	Semester Credits
Year 4	Fall	12

Courses
- Hospitality Studies Department Chair approval required for admission to this program of study. For the planning of semesters six through 10, meet with a faculty advisor in the Hospitality Studies Department. (Generic)

Semester Credits
12
Contact Hours
188

Year	Semester	Semester Credits
Year 4	Winter	12

Courses
- Hospitality Studies Department Chair approval required for admission to this program of study. For the planning of semesters six through 10, meet with a faculty advisor in the Hospitality Studies Department. (Generic)

Semester Credits
12
Contact Hours
188

Program Requirements

Minimum Credits for Program Completion	Minimum GPA required for Graduation	HFC Credit Hour Residency Requirement
120	2.000	20

Simple Requisites

Core Course Requirements

Culinary Arts BS - Core Course Requirements
Type
Completion Requirement

Complete ALL of the following Courses:
- HOSP105-Applied Food Serv Sanitation 2 credits
- HOSP211-Intro to Hospitality Industry 3 credits
- HOSP215-International Cooking 4 credits
- HOSP220-Intro to Baking & Cooking 2 credits
- HOSP224-Culinary Skills & Nutritional 3 credits
- HOSP226-Fundamentals of Baking 3 credits
- HOSP251-Dining Room Service & Operati 3 credits
- HOSP309-Meetings and Event Planning 3 credits
- HOSP310-Hosp Supervision & Leadership 3 credits
- HOSP325-Dining Room Captain 3 credits
- HOSP330-Food and Nutrition 3 credits
- HOSP331-Modern and European Pastry 6 credits
- HOSP340-A'la Carte and Buffet Cookery 8 credits
- HOSP341-Garde Manger and Menu Planning 6 credits
- HOSP360-Hospitality Purchasing 3 credits
- HOSP370-Food and Beverage Controls 3 credits
- HOSP421-Professional Strategies Culina 4 credits
- HOSP490-Co-Op in Culinary Arts 2 credits

Hospitality Co-Op

Earn at least 2 credits from the following:
- HOSP190-Co-op in Hospitality 1 credits
  OR HOSP290-Co-op in Hospitality 2 credits

Support Course Requirements

Culinary Arts BS - Support Course Requirements
Type
Completion Requirement

Hospitality Support

Earn at least 6 credits from the following:
- HOSP101-Wines of the World 1 credits
  OR HOSP103-Maj Wine Grape Var 1 credits
  OR HOSP107-Artisanal Cheese & Craft Beer 1 credits
  OR HOSP145-Ice Carving and Design 3 credits
  OR HOSP221-Front Office Procedures 3 credits
  OR HOSP235-Ice Carving for Professional 3 credits
  OR HOSP245-Hotel & Rest Desserts 3 credits
  OR HOSP250-Hospitality & Travel Marketing 3 credits
  OR HOSP255-Professional Cake Decorating 3 credits
  OR HOSP270-Facilities Management 3 credits

Complete ALL of the following Courses:
- BAC131-Intro to Financial Accounting 4 credits
- BAC132-Intro to Managerial Accounting 4 credits
- BEC151-Prin Macro Economics 3 credits
- BEC152-Prin Micro Economics 3 credits
- ENG131-Introduction College Writing 3 credits

Category 2: English Composition or Communication

Complete at least 1 of the following courses:
- ENG132-College Writing and Research 3 credits
  OR ENG132H-Honors Coll Writing & Research 3 credits
  OR ENG135-Bus & Tech Writing & Research 3 credits

Computer Technology

Complete ALL of the following Courses:
- CIS100-Intro Info Tech 3 credits

Category 3: Mathematics

Complete at least 1 of the following courses:
- MATH104-Math for Food Service Careers 4 credits
  OR
  OR MATH110-Intermediate Algebra 4 credits
  OR MATH112-Trigonometry 3 credits
  OR MATH115-College Algebra 5 credits
  OR MATH131-Math for the Modern World 4 credits
  OR
  OR
  OR
  OR MATH175-Precalculus 5 credits

World Languages

World Languages: Complete 8 credits from Arabic (ARA), Chinese (CHN), French (FRE), German (GER), Italian (ITAL), Spanish (SPN)

Earn at least 8 credits

Elective Hours

Complete additional 100-level, or higher, courses to complete the requirements for this degree.

Earn at least 1 credits

General Education Requirements

Culinary Arts BS - General Education Course Requirements
Type
Completion Requirement

Category 4: Social Sciences

Complete any one, from a different discipline (other than BEC).

Complete at least 1 courses in the following course sets:
- CAT4 - Gen Ed Applied - 2020

Category 5: Humanities and Fine Arts

Complete any one, from a different discipline (other than a World Language).

Complete at least 1 courses in the following course sets:
- Untitled Course set

Category 6: Natural Sciences

Complete any two, including one with laboratory experience, from different disciplines.

Complete at least 2 courses in the following course sets:
- CAT6 - Gen Ed Applied - 2020

Additional Comments:
General Education Credit Hours: 13.00

See General Education Requirements for Applied Degrees for details.

CULSK.CA - Culinary Skills

Program Information

Program Title
Culinary Skills Certificate

Program Code
CULSK.CA

Degree Type
Certificate of Achievement

Minimum Credits for Program Completion
18

Program Eligible for Financial Aid?
Yes

Subject
Culinary Arts, Hospitality Mgm

Semesters to Complete Program
2

Program Description
Provides the basic foundational skills necessary for quality food production in a professional kitchen. Consists of both lab and lecture classes. Courses may be applied toward an Associate in Applied Science degree in Culinary Arts and/or an Associate in Applied Science degree in Hotel/Restaurant Management.

Program Accreditation Information
The Associate in Applied Science in Culinary Arts at HFC is accredited by the Accrediting Commission of the American Culinary Federation Educational Foundation.

Faculty Contact	Faculty Contact Email	Faculty Contact Phone	Faculty Contact Office Location
Eric Gackenbach	epgackenbach@hfcc.edu	313-317-1572	N-155B

Academic Advisor	Academic Advisor Contact Email	Academic Advisor Contact Phone	Academic Advisor Office Location
Ashlei Chears	achears@hfcc.edu	313-845-6486	E-211H

School
Business, Entrepreneurship, PD

Academic Department
Culinary Arts + Hospitality Management

Admissions Requirements

Admissions Requirements
Additional Program Requirements

Official chef's uniform required to be purchased prior to beginning culinary lab courses. Visit the Hospitality Department, Room M-163 in the Culinary Arts & Student Center (M building), or online at https://culinary.hfcc.edu/ for uniform ordering information.

Program Learning Outcomes

Execute a menu from start to finish in compliance with ACF category F and G standards for edible hot and cold food.

Based on NRA standards, decide how to handle various types of food in order to prevent food borne illness.

What Classes do I take?

2-Year Plan
Culinary Skills - CA: Recommended Sequence - Current
Total Credits
18
Description
Enrollment Status: Full Time

If you have questions about the order in which you should take these courses, or the availability of these courses, please contact your advisor or the faculty contact listed below.

Program Contact Information

Office Contact: School of Business, Entrepreneurship, and Professional Development: 313-845-9645, bepdinfo@hfcc.edu, Technology Bldg, Room: E-211

Faculty Contact: Eric Gackenbach: 313-317-1572, epgackenbach@hfcc.edu, Campus Safety, Room: N-155B

Academic Advisor: Ashlei Chears: 313-845-6486, achears@hfcc.edu, Technology Bldg, Room: E-211H

For students in an older version of this program, please visit Henry Ford College Catalog Archive to view required courses.

Year	Semester	Semester Credits
Year 1	Fall	10

Courses
- HOSP105 - Applied Food Service Sanitation

Semester Credits 2
Contact Hours 32

Courses
- HOSP220 - Introduction to Baking and Cooking

Semester Credits 2
Contact Hours 32

Courses
- HOSP224 - Culinary Skills and Nutritional Cooking

Semester Credits 3
Contact Hours 69.5

Courses
- HOSP226 - Fundamentals of Baking

Semester Credits 3
Contact Hours 69.5

Year	Semester	Semester Credits
Year 1	Winter	8

Courses
- HOSP340 - A'la Carte and Buffet Cookery

Semester Credits 8
Contact Hours 152

Program Requirements

Minimum Credits for Program Completion
18

Minimum GPA required for Graduation
2.000

HFC Credit Hour Residency Requirement
20

Simple Requisites

Core Course Requirements

Culinary Skills CA - Core Course Requirements
Type
Completion Requirement

HOSP220 Intro to Baking & Cooking, HOSP224 Culinary Skills & Nutritional, and HOSP226 Fundamentals of Baking must be taken concurrently.

Complete ALL of the following Courses:

- HOSP105-Applied Food Serv Sanitation 2 credits
- HOSP220-Intro to Baking & Cooking 2 credits
- HOSP224-Culinary Skills & Nutritional 3 credits
- HOSP226-Fundamentals of Baking 3 credits
- HOSP340-A'la Carte and Buffet Cookery 8 credits

CUSRV.CA - Customer Service Professional

Program Information

Program Title
Customer Service Professional Certificate

Program Code
CUSRV.CA

Degree Type
Certificate of Achievement

Minimum Credits for Program Completion
17

Program Eligible for Financial Aid?
Yes

Subject
Business Administration

Semesters to Complete Program
2

Program Description
Course work emphasizes oral and written communication skills, workplace skills, and basic computer skills and includes training to work effectively as a Customer Service Representative (CSR). CSRs interact with a company's customers by answering questions about products, services or billings. CSRs, working in a call center or in a customer service department, receive in-bound calls from a company's customers and enter orders for products or services, sell tickets, make reservations, and solve problems that customers are experiencing.

The Customer Service Professional certificate (developed in consultation with businesses such as Blue Cross Blue Shield, Ford Motor Company, DTE Energy, and Oakwood Hospital and Medical Center) may be used as a building block towards earning an Associate in Business degree.

Faculty Contact
Diane Smith

Faculty Contact Email
dlsmith1@hfcc.edu

Faculty Contact Phone
313-845-9702

Faculty Contact Office Location
K-319D

Academic Advisor
Ashlei Chears

Academic Advisor Contact Email
achears@hfcc.edu

Academic Advisor Contact Phone
313-845-6486

Academic Advisor Office Location
E-211H

School
Business, Entrepreneurship, PD

Academic Department
Business & Economics

Program Learning Outcomes

- Compose effective written communication for a business environment.
- Demonstrate effective non-verbal and verbal communication skills for a business environment.
- Employ effective organizational skills in a business environment.
- Practice proper business etiquette and business protocol.

What Classes do I take?

2-Year Plan
Customer Service Professional - CA: Recommended Sequence - Current
Total Credits
17
Description
If you have questions about the order in which you should take these courses, or the availability of these courses, please contact your advisor or the faculty contact listed below.

Program Contact Information

Office Contact: School of Business, Entrepreneurship, and Professional Development: 313-845-9645, bepdinfo@hfcc.edu, Technology Bldg, Room: E-211

Faculty Contact: Diane Smith: 313-845-9702, dlsmith1@hfcc.edu, Liberal Arts Building, Room: K-319D

Academic Advisor: Ashlei Chears: 313-845-6486, achears@hfcc.edu, Technology Bldg, Room: E-211H

For students in an older version of this program, please visit Henry Ford College Catalog Archive to view required courses.

Year	Semester	Semester Credits
Year 1	Fall	9

Courses
- BBA110 - Business Grammar and Punctuation

Semester Credits 3
Contact Hours 47

Courses
- BBA133 - Business Behavior and Communication

Semester Credits 3
Contact Hours 47

Courses
- CIS100 - Introduction to Information Technology

Semester Credits 3
Contact Hours 47

Year	Semester	Semester Credits
Year 1	Winter	8

Courses
- BBA153 - Customer Service

Semester Credits 3
Contact Hours 47

Courses
- BBA159 - Contact Center/Help Desk Practicum

Semester Credits 2
Contact Hours 32

Courses
- BBA231 - Business Communications

Semester Credits 3
Contact Hours 47

Program Requirements

Minimum Credits for Program Completion
17

Minimum GPA required for Graduation
2.000

HFC Credit Hour Residency Requirement
20

Simple Requisites

Core Course Requirements

Customer Service Professional CA - Core Course Requirements
Type
Completion Requirement

Complete ALL of the following Courses:

- CIS100-Intro Info Tech 3 credits
- BBA133-Bus Behavr & Comm 3 credits
- BBA153-Customer Service 3 credits
- BBA159-Contact Center/Help Desk Pract 2 credits
- BBA110-Business Grammar & Punctuation 3 credits
- BBA231-Business Communications 3 credits

CYBERSECUR.CA - Cybersecurity

Program Information

Program Title
Cybersecurity Certificate

Program Code
CYBERSECUR.CA

Degree Type
Certificate of Achievement

Minimum Credits for Program Completion
27

Program Eligible for Financial Aid?
Yes

Subject
CyberSecurity (IA)

Semesters to Complete Program
3

Program Description
Provides a mid-level understanding of the technological needs, threats, and vulnerabilities of hardware, software, operating systems, networks and the Internet. Students will examine operating systems, networks, tools and protocols needed to navigate, use, and manage security technologies as well as gain insight into the legal, social, and political dynamics of the cyber universe. Designed for students interested in cyber defense or IT professionals seeking a fundamental understanding of cybersecurity.

Faculty Contact
Marrci Conner

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mrconner2@hfcc.edu

Faculty Contact Phone
313-317-4021

Faculty Contact Office Location
E-162J

Academic Advisor
DeJanae Hayes

Academic Advisor Contact Email
dhayes8@hfcc.edu

Academic Advisor Contact Phone
313-845-9792

Academic Advisor Office Location
E-211C

School
Business, Entrepreneurship, PD

Academic Department
Computer Technology

Program Learning Outcomes

Write UNIX shell scripts and manipulate the UNIX operating system and services.

Recognize networks, operating systems and hardware.

Identify and explain the ten domains of cybersecurity.

Analyze and establish security requirements for systems/networks.

Defend systems against unauthorized access, modification and/or destruction.

Use cybersecurity tools (KALI, NMAP, Wireshark, SNORT, etc.)

Define access privileges, control structures, and resources.

What Classes do I take?

2-Year Plan
Cybersecurity - CA: Recommended Sequence - Current
Total Credits
27
Description
Enrollment Status: Full Time

If you have questions about the order in which you should take these courses, or the availability of these courses, please contact your advisor or the faculty contact listed below.

Program Contact Information

Office Contact: School of Business, Entrepreneurship, and Professional Development: 313-845-9645, bepdinfo@hfcc.edu, Technology Bldg, Room: E-211

Faculty Contact: Marrci Conner: 313-317-4021, mrconner2@hfcc.edu, Technology Bldg, Room: E-162J

Academic Advisor: DeJanae Hayes: 313-845-9792, dhayes8@hfcc.edu, Technology E-211H Bldg, Room: E-211C

For students in an older version of this program, please visit Henry Ford College Catalog Archive to view required courses.

Year	Semester	Semester Credits
Year 1	Fall	8

Courses

- CIS125 - Principles of Programming Logic

Semester Credits 4
Contact Hours 62

Courses

- CNT110 - CCNA: Networking I

Semester Credits 4
Contact Hours 77

Year	Semester	Semester Credits
Year 1	Winter	11

Courses

- CIS111 - SQL for Database Development

Semester Credits 3
Contact Hours 62

Courses

- CIS129 - Intro to UNIX With Shell Scripting

Semester Credits 4
Contact Hours 62

Courses
- CNT120 - CCNA: Networking II

Semester Credits
4
Contact Hours
77

Year	Semester	Semester Credits
Year 2	Fall	8

Courses
- CIS280 - Information Assurance and Security

Semester Credits
4
Contact Hours
62

Courses
- CNT260 - Network Security

Semester Credits
4
Contact Hours
62

2-Year Plan
Cybersecurity - CA: Recommended Sequence 2022-2023
Total Credits
27
Description
Enrollment Status: Full Time

If you have questions about the order in which you should take these courses, or the availability of these courses, please contact your advisor or the faculty contact listed below.

Program Contact Information

Office Contact: School of Business, Entrepreneurship, and Professional Development: 313-845-9645, bepdinfo@hfcc.edu, Technology Bldg, Room: E-211

Faculty Contact: Marrci Conner: 313-317-4021, mrconner2@hfcc.edu, Technology Bldg, Room: E-162J

Academic Advisor: DeJanae Hayes: 313-845-9792, dhayes8@hfcc.edu, Technology E-211H Bldg, Room: E-211C

For students in an older version of this program, please visit Henry Ford College Catalog Archive to view required courses.

Year	Semester	Semester Credits
Year 1	Fall	8

Courses
- CIS125 - Principles of Programming Logic

Semester Credits
4
Contact Hours
62

Courses
- CNT110 - CCNA: Networking I

Semester Credits
4
Contact Hours
77

Year	Semester	Semester Credits
Year 1	Winter	15

Courses
- CIS111 - SQL for Database Development

Semester Credits
3
Contact Hours
62

Courses
- CIS129 - Intro to UNIX With Shell Scripting

Semester Credits
4
Contact Hours
62

Courses
- CNT120 - CCNA: Networking II

Semester Credits
4
Contact Hours
77

Courses
- CNT260 - Network Security

Semester Credits
4
Contact Hours
62

Year	Semester	Semester Credits
Year 2	Fall	4

Courses
- CIS280 - Information Assurance and Security

Semester Credits
4
Contact Hours
62

Program Requirements

Minimum Credits for Program Completion	Minimum GPA required for Graduation	HFC Credit Hour Residency Requirement
27	2.000	20

Simple Requisites

Core Course Requirements

Cybersecurity CA - Core Course Requirements
Type
Completion Requirement

Complete ALL of the following Courses:
- CNT110-CCNA: Networking I 4 credits
- CNT120-CCNA: Networking II 4 credits
- CIS111-SQL for Database Development 3 credits
- CIS125-Prin of Programming Logic 4 credits
- CIS129-Intro to UNIX Shell Script 4 credits
- CIS280-Info Assurance and Security 4 credits
- CNT260-Network Security 4 credits

DEAFSTUDIESCOMM.CA - Deaf Studies and the Community

Program Information

Program Title
Deaf Studies and the Community

Program Code
DEAFSTUDIESCOMM.CA

Degree Type
Certificate of Achievement

Minimum Credits for Program Completion
20

Subject
Language Studies

Semesters to Complete Program
2

Program Description
Provides an understanding of Deaf culture and ensures that students reach a beginning level of competency in American Sign Language (ASL) skills. ASL courses are aligned with the American Council on the Teaching of Foreign Languages (ACTFL) proficiency standards. The proficiency goal for for students in this program is to reach "Novice High" on the ACTFL scale. According to ACTFL, a Novice High speaker is able to successfully handle uncomplicated communicative tasks involving predictable topics necessary for survival in ASL communicative situations. In addition to responding to simple direct questions and requests for information, these speakers are also able to ask formulaic questions. Novice High listeners (attenders) are able to accurately comprehend simple exchanges of sentence-length speech relating to familiar or predictable topics. Students may wish to continue studies at Henry Ford College or the university level; however, upon completion of the program, students are eligible to communicate basic personal information and express a limited number of activities, preferences, and immediate needs in social or work settings. Graduates wishing to pursue a bachelor's degree may transfer most if not all of the course work toward that degree.

Faculty Contact
Jennifer Stewart

Faculty Contact Email
jestewart1@hfcc.edu

Faculty Contact Phone
313-845-6481

Faculty Contact Office Location
K-235

Academic Advisor
Sarah Krizan

Academic Advisor Contact Email
smkrizan@hfcc.edu

Academic Advisor Contact Phone
313-845-9889

Academic Advisor Office Location
K-248

School
Liberal Arts

Academic Department
Language Studies

Program Learning Outcomes

Initiate, conduct and terminate context-specific conversations with Deaf or ASL users.

Compare and contrast American mainstream culture with Deaf culture.

Finger-spell words, numbers and loan signs clearly and accurately in regard to articulation, rate of transition from letter to letter, word configuration and distinction between words, moving from one letter to the next in a rhythmic fashion without extraneous movements.

Interpret novice-level ASL to grammatically-correct and correctly-phrased English.

Describe psychological development of hearing and non-hearing individuals and communities.

What Classes do I take?

2-Year Plan
Deaf Studies and the Community - CA: Recommended Sequence - Current
Total Credits
20
Description
Enrollment Status: Full Time

If you have questions about the order in which you should take these courses, or the availability of these courses, please contact your advisor or the faculty contact listed below.

Program Contact Information

Office Contact: School of Liberal Arts: 313-845-9624, lainfo@hfcc.edu, Liberal Arts Building, Room: K-201 and F-138

Faculty Contact: Jennifer Stewart: 313-845-6481, jestewart1@hfcc.edu, Liberal Arts Building, Room: K-235

Academic Advisor: Sarah Krizan: 313-845-9889, smkrizan@hfcc.edu, Liberal Arts Bldg, Room: K-248

For students in an older version of this program, please visit Henry Ford College Catalog Archive to view required courses.

Year	Semester	Semester Credits
Year 1	Fall	10

Courses
- ASL130 - Deaf Culture and the Deaf Community

Semester Credits
3
Contact Hours
47

Courses
- ASL131 - Elementary American Sign Language I

Semester Credits
4
Contact Hours
62

Courses
- ENG131 - Introduction to College Writing

Semester Credits
3
Contact Hours
47

Year	Semester	Semester Credits
Year 1	Winter	10

Courses
- ASL132 - Elementary American Sign Language II

Semester Credits
4
Contact Hours
62

Courses
- ASL140 - Fingerspelling and Numbering

Semester Credits
3
Contact Hours
47

Courses
- PSY131 - Introductory Psychology

Semester Credits
3
Contact Hours
47

Program Requirements

Minimum Credits for Program Completion
20

Minimum GPA required for Graduation
2.000

HFC Credit Hour Residency Requirement
20

Simple Requisites

Core Course Requirements

Deaf Studies and the Community CA - Core Course Requirements
Type
Completion Requirement

Complete ALL of the following Courses:
- ASL130-Deaf Culture & the Deaf Comm 3 credits
- ASL131-Elementary ASL I 4 credits
- ASL132-Elementary ASL II 4 credits
- ASL140-Fingerspelling and Numbering 3 credits

Support Course Requirements

Deaf Studies and the Community CA - Support Course Requirements
Type
Completion Requirement

Category 1: English Composition

Complete ALL of the following Courses:
- ENG131-Introduction College Writing 3 credits

Category 4: Social Sciences

Complete ALL of the following Courses:
- PSY131-Introductory Psychology 3 credits

DSGNMANFCT.AAS - Design and Manufacturing

Program Information

Program Title
Design and Manufacturing

Program Code
DSGNMANFCT.AAS

Degree Type
Associate in Applied Science

Minimum Credits for Program Completion
60

Program Eligible for Financial Aid?
Yes

Subject
Machine Tool Technology

Semesters to Complete Program
4

Program Description
This degree offers the opportunity to develop skills in both Computer-Aided Drafting/Design and Computer-Aided Manufacturing/CNC. This multi-disciplinary program between HFC's CAD/Drafting and Machine Tool Technology departments is based in both CAD, CNC and Manufacturing technologies . Together these areas help students develop a foundation and the necessary hands-on experience that leads to better designed and manufactured products. Utilizing both disciplines, students who are successful gain a deeper appreciation for the resources and complexities that exist in each area independently, and as they work together in industry. Students develop and refine the skills and experience needed by entry-level and experienced CAD-CAM and CNC Operators.

Faculty Contact
Guy Pizzino

Faculty Contact Email
gpizzino@hfcc.edu

Faculty Contact Phone
313-845-6331

Faculty Contact Office Location
E-117B

Academic Advisor
Rachel Vanzutphen

Academic Advisor Contact Email
rvanzutphen@hfcc.edu

Academic Advisor Contact Phone
313-845-9873

Academic Advisor Office Location
E-211L

School
Business, Entrepreneurship, PD

Academic Department
Advanced Manufacturing

Program Learning Outcomes

- Develop knowledge of career opportunities and demonstrate the requisite entry-level CAD and industrial drafting skills for the manufacturing industry.
- Utilize drafting principles to read and comprehend a part drawing.
- Apply and layout dimensions on a part drawing for manufacturing.
- Create a part design using 3-D CAD software program.
- Create a basic or complex part on non-computerized industry standard machining and turning equipment.
- Create complete complex parts on computer controlled machining centers.
- Create complete complex parts on computer controlled turning centers.
- Utilize appropriate technology to solve complex problems through critical analysis in the machining environment.
- Synthesize information using numerical control software to complete three-dimensional parts on computer controlled milling and turning centers.

What Classes do I take?

2-Year Plan
Design and Manufacturing - AAS: Recommended Sequence - Current
Total Credits
60
Description
Enrollment Status: Full Time

If you have questions about the order in which you should take these courses, or the availability of these courses, please contact your advisor or the faculty contact listed below.

Program Contact Information

Office Contact: School of Business, Entrepreneurship, and Professional Development: 313-845-9645, bepdinfo@hfcc.edu, Technology Bldg, Room: E-211

Faculty Contact: Guy Pizzino: 313-845-6331, gpizzino@hfcc.edu, Technology Bldg, Room: E-117B

Academic Advisor: Rachel Vanzutphen: 313-845-9873, rvanzutphen@hfcc.edu, Technology Bldg, Room: E-211L

For students in an older version of this program, please visit Henry Ford College Catalog Archive to view required courses.

Year	Semester	Semester Credits
Year 1	Fall	14

Courses
- DRAF110 - Introduction to Industrial Drafting

Semester Credits 3
Contact Hours 77

Courses
- DRAF120 - Introduction to CAD

Semester Credits 4
Contact Hours 92

Courses
- MTT100 - Machine Tool Processes I

Semester Credits 4
Contact Hours 92

Courses
- MTT130 - Quality Control Gaging & Inspection

Semester Credits 3
Contact Hours 62

Year	Semester	Semester Credits
Year 1	Winter	11

Courses
- DRAF123 - Introduction to CATIA V5

Semester Credits 2
Contact Hours 32

Courses
- MTT140 - Introduction to CNC

Semester Credits 3
Contact Hours 62

Courses
- CIS100 - Introduction to Information Technology

Semester Credits 3
Contact Hours 47

Courses
- ENG131 - Introduction to College Writing
  OR
- ENG131A - Introduction to College Writing (ALP)
  OR
- ENG131H - Honors Introduction to College Writing

Semester Credits 3
Contact Hours 47

Year	Semester	Semester Credits
Year 1	Summer	3

Courses
- ENG135 - Business & Technical Writing & Research

Semester Credits 3
Contact Hours 47

Year	Semester	Semester Credits
Year 2	Fall	32

Courses
- MATH100 - Basic Technical Mathematics

Semester Credits 4
Contact Hours 62

Courses
- BEC151 - Principles of Macroeconomics
  OR
- BEC152 - Principles of Microeconomics
  OR
- GEOG132 - World Regional Geography
  OR
- HIST151 - Early American History
  OR
- POLS131 - Intro to American Gov't & Politi Science
  OR
- SOC131 - Introduction to Sociology

Semester Credits 3
Contact Hours 47

Courses
- Complete the required courses within one of the following two concentrations. Consult with the program lead or faculty chair to determine the appropriate concentration for you. (Generic)

Semester Credits 25
Contact Hours 400

Program Requirements

Minimum Credits for Program Completion
60

Minimum GPA required for Graduation
2.000

HFC Credit Hour Residency Requirement
20

Simple Requisites

Core Course Requirements

Design and Manufacturing AAS - Core Course Requirements
Type
Completion Requirement

Complete ALL of the following Courses:
- DRAF110-Intro Industrial Drafting 3 credits
- DRAF120-Intro to CAD 4 credits
- DRAF123-Introduction to CATIA V5 2 credits
- MTT100-Machine Tool Processes I 4 credits
- MTT130-Quality Cont Gaging & Inspecti 3 credits
- MTT140-Introduction to CNC 3 credits
- CIS100-Intro Info Tech 3 credits

Support Course Requirements

Design and Manufacturing AAS - Support Course Requirements
Type
Completion Requirement

Design Concentration

Design Concentration For students pursuing the Design concentration, complete the 6 required courses and then choose 8 credit hours from the remaining courses.

Complete ALL of the following Courses:

- DRAF130-Technical Descriptive Geometr 3 credits
- DRAF142-Industrial Detail 4 credits
- DRAF210-Die Design 3 credits
- DRAF220-Machine Element Drafting 2 credits
- DRAF230-Jigs, Fixtures, and Tools 3 credits
- DRAF240-Product Drawing 2 credits

Design Concentration Electives

Design Concentration Electives Complete at least 8 credit hours from these courses.

Earn at least 8 credits from the following:

- DRAF125-CATIA V5 Level II 2 credits
  OR DRAF127-CATIA V5 Level III 2 credits
  OR DRAF255-Advanced Techniques 4 credits
  OR DRAF260-Advd Cad Apps Solid Modeling 4 credits
  OR MTT160-Comp Assisted N/C Programming 3 credits
  OR MTT170-Adv Comp Assisted N/C Program 3 credits
  OR ICO190-Co-op in Industrial Technolog 1 credits
  OR ICO290-Co-op in Industrial Technolog 2 credits

Manufacturing Concentration

Manufacturing Concentration For students pursuing the Manufacturing concentration, complete the 3 required courses and then choose 14 credit hours from the remaining courses.

Complete ALL of the following Courses:

- MTT105-Print Rdg for Manufacturing 3 credits
- MTT110-Machine Tool Processes II 4 credits
- MTT145-CNC Operations 4 credits

Manufacturing Concentration Electives

Manufacturing Concentration Electives Complete at least 14 credit hours from these courses.

Earn at least 14 credits from the following:

- MTT146-Introd to Machine Tool Probing 1 credits
  OR MTT147-Basic Macro Programmi for CNC 1 credits
  OR MTT148-Advanced CNC Probing 1 credits
  OR MTT150-Statistical Proc Ctrl in Manf 3 credits
  OR MTT170-Adv Comp Assisted N/C Program 3 credits
  OR DRAF125-CATIA V5 Level II 2 credits
  OR DRAF127-CATIA V5 Level III 2 credits
  OR DRAF130-Technical Descriptive Geometr 3 credits
  OR DRAF210-Die Design 3 credits
  OR DRAF230-Jigs, Fixtures, and Tools 3 credits

General Education Requirements

Design and Manufacturing AAS - General Education Course Requirements
Type
Completion Requirement

Category 1: English Composition

Complete at least 1 of the following courses:

- ENG131-Introduction College Writing 3 credits
  OR ENG131A-Intro College Writing (ALP) 3 credits
  OR ENG131H-Honors Intro College Writing 3 credits

Category 2: English Composition or Communications

Complete ALL of the following Courses:

- ENG135-Bus & Tech Writing & Research 3 credits

Category 3: Mathematics

Complete ALL of the following Courses:

- MATH100-Basic Tech Mathematics 4 credits

Category 4: Social Sciences

Complete at least 1 courses in the following course sets:

- CAT4 - Gen Ed Applied - 2020

Additional Comments:
See General Education Requirements for Applied Degrees for details.

EDPAR.CA - Education Paraprofessional

Program Information

Program Title
Education Paraprofessional Certificate

Program Code
EDPAR.CA

Degree Type
Certificate of Achievement

Minimum Credits for Program Completion
25

Program Eligible for Financial Aid?
Yes

Subject
Pre-Education

Semesters to Complete Program
2

Program Description
Designed to increase students knowledge in specific content areas and to promote the development of interaction skills necessary for working with children. This certificate enables students to work as paraprofessionals or teacher aides. Individuals who wish to earn an Associate in Arts degree in [Pre-Elementary Education](/programs/pre-elementary-education-associate-arts) may apply the total hours of this certificate program toward that degree. However, [ENG-121](/courses/eng-121) and [HPE-142](/courses/hpe-142) may not apply toward a Bachelor's degree in Elementary Education. For more information, please consult the transfer guides in the University Transfer, Advising, and Career Counseling Center.

Faculty Contact
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Faculty Contact Phone
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Faculty Contact Office Location
G-133D

Academic Advisor
Hannah Doederlein

Academic Advisor Contact Email
hrdoederlein@hfcc.edu

Academic Advisor Contact Phone
313-317-6868

Academic Advisor Office Location
G-203A

School
Health & Human Services

Academic Department
Health Careers, Education, and Human Services

Admissions Requirements

Admissions Requirements
Additional Program Requirements

The law requires new teachers, school administrators, school psychologists, and other personnel to provide documentation of a completed criminal record check. Students who complete field experiences as part of their HFC coursework must provide a statewide criminal record check prior to work with children in public or non-public schools.

Program Learning Outcomes

Develop lesson plans implementing educational software for grades P - 12.

Apply knowledge of literacy development to assist emergent and beginning readers.

Apply humanities concepts within the pre-kindergarten through secondary classroom.

Analyze elementary and middle school mathematics at the level necessary for teaching.

Apply knowledge of the physical, emotional, intellectual, and social development theories of the learner in a school setting.

Apply knowledge of the exceptionalities, learning environments, and laws as they relate to special education programs.

Analyze legal requirements and educational services required to meet the needs of students with different exceptionalities.

Construct scientific knowledge using inquiry-based techniques.

What Classes do I take?

2-Year Plan
Education Paraprofessional - CA: Recommended Sequence - Current
Total Credits
25
Description
Enrollment Status: Full Time

If you have questions about the order in which you should take these courses, or the availability of these courses, please contact your advisor or the faculty contact listed below.

Program Contact Information

Office Contact: School of Health and Human Services: 313-845-9877, hhsinfo@hfcc.edu, Health Careers Education Ctr, Room: G-132

Faculty Contact: Carolyn Casale: 313-317-6580, ccasale@hfcc.edu, Health Careers Education Ctr, Room: G-133D

Academic Advisor: Hannah Doederlein: 313-317-6868, hrdoederlein@hfcc.edu, Health Careers Bldg, Room: G-203A

For students in an older version of this program, please visit Henry Ford College Catalog Archive to view required courses.

Year	Semester	Semester Credits
Year 1	Fall	13

Courses

- CIS221 - Instructional Tech Educators (Pre K-12)

Semester Credits 3
Contact Hours 47

Courses

- ENG131 - Introduction to College Writing

Semester Credits 3
Contact Hours 47

Courses
- PSY131 - Introductory Psychology

Semester Credits
3
Contact Hours
47

Courses
- SCI212 - Earth Science for Educators
  OR
- SCI213 - Learning By Inquiry: Life Science

Semester Credits
4
Contact Hours
62

Year	Semester	Semester Credits
Year 1	Winter	12

Courses
- EDU250 - Humanities & Performing Arts Educators

Semester Credits
3
Contact Hours
47

Courses
- EDU296 - Exceptional Child

Semester Credits
3
Contact Hours
47

Courses
- ENG132 - College Writing and Research

Semester Credits
3
Contact Hours
47

Courses
- ENG246 - Introduction to Children's Literature

Semester Credits
3
Contact Hours
47

2-Year Plan
Education Paraprofessional - CA: Recommended Sequence -2023-2024
Total Credits
25
Description
Enrollment Status: Full Time

If you have questions about the order in which you should take these courses, or the availability of these courses, please contact your advisor or the faculty contact listed below.

Program Contact Information

Office Contact: School of Health and Human Services: 313-845-9877, hhsinfo@hfcc.edu, Health Careers Education Ctr, Room: G-132

Faculty Contact: Carolyn Casale: 313-317-6580, ccasale@hfcc.edu, Health Careers Education Ctr, Room: G-133D

Academic Advisor: Hannah Doederlein: 313-317-6868, hrdoederlein@hfcc.edu, Health Careers Bldg, Room: G-203A

For students in an older version of this program, please visit Henry Ford College Catalog Archive to view required courses.

Year	Semester	Semester Credits
Year 1	Fall	12

Courses
- CIS221 - Instructional Tech Educators (Pre K-12)

Semester Credits
3
Contact Hours
47

Courses
- EDU250 - Humanities & Performing Arts Educators

Semester Credits
3
Contact Hours
47

Courses
- ENG131 - Introduction to College Writing

Semester Credits
3
Contact Hours
47

Courses
- PSY131 - Introductory Psychology

Semester Credits
3
Contact Hours
47

Year	Semester	Semester Credits
Year 1	Winter	13

Courses
- SCI212 - Earth Science for Educators
  OR
- SCI213 - Learning By Inquiry: Life Science

Semester Credits 4
Contact Hours 62

Courses
- EDU296 - Exceptional Child

Semester Credits 3
Contact Hours 47

Courses
- ENG132 - College Writing and Research

Semester Credits 3
Contact Hours 47

Courses
- ENG246 - Introduction to Children's Literature

Semester Credits 3
Contact Hours 47

Program Requirements

Minimum Credits for Program Completion
25

Minimum GPA required for Graduation
2.000

HFC Credit Hour Residency Requirement
20

Simple Requisites

Core Course Requirements

Education Paraprofessional CA - Core Course Requirements
Type
Completion Requirement

Complete ALL of the following Courses:
- CIS221-Instruction Tech for Educators 3 credits
- EDU250-Humanities/Perform Art Educat 3 credits
- EDU296-Exceptional Child 3 credits
- ENG246-Intro to Children's Literature 3 credits

Support Course Requirements

Education Paraprofessional CA - Support Course Requirements
Type
Completion Requirement

Category 1: English Composition

Complete ALL of the following Courses:
- ENG131-Introduction College Writing 3 credits

Category 2: English Composition or Communications

Complete ALL of the following Courses:
- ENG132-College Writing and Research 3 credits

Category 4: Social Sciences

Complete ALL of the following Courses:
- PSY131-Introductory Psychology 3 credits

Category 6: Natural Sciences

Natural Science: Consult your advisor or counselor for transfer institution major/minor requirements.

Complete at least 1 of the following courses:
- SCI212-Earth Science for Educators 4 credits
  OR SCI213-Lrning by Inquiry: Life Sci 4 credits

EGR.CONSTRUCTION.AAS - Engineering Technology- Construction Management

Program Information

Program Title
Engineering Technology- Construction Management

Program Code
EGR.CONSTRUCTION.AAS

Degree Type
Associate in Applied Science

Minimum Credits for Program Completion
60

Program Eligible for Financial Aid?
Yes

Subject
Pre-Engineering

Semesters to Complete Program
4

Program Description
Provides hands-on technical skills required in workplaces through computer- and laboratory-based practice. Teaches architectural CAD/drafting and building construction methods and materials. Laboratory classes provide students with experience in construction materials, computer-aided drafting and design, cost estimating, construction methods, presentation techniques, and construction practices. Covers the principles and necessary skills of the architectural profession supported by an understanding of building construction through laboratory activities designed to provide students with a practical skill-based education. The required math courses ease the transfer of students to a 4-year institute for completion of a Bachelor of Engineering Technology.

Faculty Contact
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Faculty Contact Email
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Faculty Contact Phone
313-317-1746

Faculty Contact Office Location
J-106B

Academic Advisor
Brandi Walthall-Johnson

Academic Advisor Contact Email
bswalthall-johnson@hfcc.edu

Academic Advisor Contact Phone
313-317-6811

Academic Advisor Office Location
G-120J

School
Science, Tech, Engr & Math

Academic Department
Engineering Technology

Program Learning Outcomes

Apply standard methods of mathematical analysis.

Develop knowledge of career opportunities and demonstrate the technical skills required by industry.

Demonstrate professional ethics appropriate to the field of engineering technology.

Prepare a series of construction documents utilizing current industry software and accepted architectural standards and techniques.

Develop a series of design presentation drawings utilizing traditional and computerized techniques.

What Classes do I take?

2-Year Plan
Engineering Technology: Construction Management - AAS: Recommended Sequence - Current
Total Credits
60
Description
Enrollment Status: Full Time

If you have questions about the order in which you should take these courses, or the availability of these courses, please contact your advisor or the faculty contact listed below.

Program Contact Information

Office Contact: School of Science, Technology, Engineering, and Mathematics (STEM): 313-845-9632, steminfo@hfcc.edu, Health Careers Education Ctr, Room: G-110, G-122 and J-115

Faculty Contact: Hassan Mohseni Nameghi: 313-317-1746, hnameghi@hfcc.edu, Science Bldg, Room: J-106B

Academic Advisor: Brandi Walthall-Johnson: 313-317-6811, bswalthall-johnson@hfcc.edu, Health Careers Bldg, Room: G-120J

For students in an older version of this program, please visit Henry Ford College Catalog Archive to view required courses.

Year	Semester	Semester Credits
Year 1	Fall	17

Courses
- Architecture Construction: Complete four (4) credits from the Architecture Construction (BLDA) course list. (Generic)

Semester Credits
4
Contact Hours
62

Courses
- Drafting or Engineering: Complete three (3) credits from the Drafting (DRAF) or Engineering (ENGR) course list. (Generic)

Semester Credits
3
Contact Hours
47

Courses
- BEC151 - Principles of Macroeconomics
  OR
- BEC152 - Principles of Microeconomics

Semester Credits
3
Contact Hours
47

Courses
- CAT3 - Gen Ed Applied - 2025

Semester Credits
4
Contact Hours
62

Courses
- CAT1 - Gen Ed Applied - 2020

Semester Credits
3
Contact Hours
47

Year	Semester	Semester Credits
Year 1	Winter	15

Courses
- Architecture Construction: Complete six (6) credits from the Architecture Construction (BLDA) course list. (Generic)

Semester Credits
6
Contact Hours
94

Courses
- Drafting or Engineering: Complete three (3) credits from the Drafting (DRAF) or Engineering (ENGR) course list. (Generic)

Semester Credits
3
Contact Hours
47

Courses
- ENGR130 - Introduction to Engineering

Semester Credits
3
Contact Hours
47

Courses
- CAT2 - Gen Ed Applied - 2020

Semester Credits
3
Contact Hours
47

Year	Semester	Semester Credits
Year 2	Fall	14

Courses
- ENGT245 - Applied Statics

Semester Credits
3
Contact Hours
62

Courses
- Architecture Construction: Complete eight (8) credits from the Architecture Construction (BLDA) course list. (Generic)

Semester Credits
8
Contact Hours
128

Courses
- Computer Technology - 2020

Semester Credits
3
Contact Hours
47

Year	Semester	Semester Credits
Year 2	Winter	14

Courses
- PHIL139 - Ethics

Semester Credits
3
Contact Hours
47

Courses
- Architecture Construction: Complete six (6) credits from the Architecture Construction (BLDA) course list. (Generic)

Semester Credits
6
Contact Hours
94

Courses
- Electives: Complete additional 100-level, or higher, credits to complete this degree. (Generic)

Semester Credits
5
Contact Hours
77

Program Requirements

Minimum Credits for Program Completion
60

Minimum GPA required for Graduation
2.000

HFC Credit Hour Residency Requirement
20

Simple Requisites

Core Course Requirements

Engineering Technology- Construction Management AAS - Core Course Requirements
Type
Completion Requirement

Architecture Construction: Complete twenty (24) additional 100-level, or higher, credits from the Building Architecture (BLDA) courses.
Earn at least 24 credits

Drafting or Engineering: Complete six (6) additional 100-level, or higher, credits from the Drafting (DRAF) or Engineering (ENGR) courses list.
Earn at least 6 credits

Complete ALL of the following Courses:
- ENGR130-Intro to Engineering 3 credits
- ENGT245-Applied Statics 3 credits

Support Course Requirements

Engineering Technology- Construction Management AAS - Support Course Requirements
Type
Completion Requirement

Category 3: Mathematics
Complete at least 1 of the following courses:
- **OR** MATH110-Intermediate Algebra 4 credits
  OR MATH115-College Algebra 5 credits
  OR MATH165-Mathematics for Calculus 6 credits
  OR MATH175-Precalculus 5 credits

OR MATH180-Calculus 1 5 credits
OR MATH183-Calculus II 5 credits
OR MATH275-Discrete Mathematics 4 credits
OR MATH280-Calculus III 5 credits
OR MATH288-Differential Equations 5 credits

Category 4: Social Sciences

Complete at least 1 of the following courses:
- BEC151-Prin Macro Economics 3 credits
  OR BEC152-Prin Micro Economics 3 credits

Category 5: Humanities and Fine Arts

Complete ALL of the following Courses:
- PHIL139-Ethics 3 credits

General Education Requirements

Engineering Technology - Construction Management AAS - General Education Course Requirements
Type
Completion Requirement

Category 1: English Composition

Complete at least 1 courses in the following course sets:
- CAT1 - Gen Ed Applied - 2020

Category 2: English Composition or Communications

Complete at least 1 courses in the following course sets:
- CAT2 - Gen Ed Applied - 2020

Additional Comments:
See General Education Requirements for Applied Degrees for details.

Degree Specific Requirements

Engineering Technology - Construction Management AAS - Degree Specific Course Requirements
Type
Completion Requirement

Computer Technology

Complete at least 1 courses in the following course sets:
- Computer Technology - 2020

Additional Comments:
See Degree Specific Requirements for details.

EGR.MECHANICAL.AAS - Engineering Technology - Mechanical

Program Information

Program Title
Engineering Technology - Mechanical AAS Degree

Program Code
EGR.MECHANICAL.AAS

Degree Type
Associate in Applied Science

Minimum Credits for Program Completion
60

Program Eligible for Financial Aid?
Yes

Subject
Pre-Engineering

Semesters to Complete Program
4

Program Description
Provide hands-on technical skills required in workplaces through computer and laboratory-based practices, and a core of related courses such as physics, mathematical applications, and introduction to engineering. Students will study the design of products by learning design principles, drafting, problem solving, mechanics of materials, knowledge of manufacturing processes and machine elements design. In addition, course works include wide background content in areas such as electricity and electrical motors, science of materials, manufacturing processes, and tool design. Design is emphasized utilizing computer drafting and design technology. In a capstone course, students are required to work in a team to design and develop a new product or process in response to a sponsor need. Graduates are prepared for several types of design technologist positions such as product designer, CAD designer, tool designer, research and development technician, or manufacturing technician. The math sequence eases the transfer of students to a 4-year institute for completion of a Bachelor of Engineering Technology.

Faculty Contact
Hassan Nameghi

Faculty Contact Email
hnameghi@hfcc.edu

Faculty Contact Phone
313-317-1746

Faculty Contact Office Location
J-106B

Academic Advisor
Brandi Walthall-Johnson

Academic Advisor Contact Email
bswalthall-johnson@hfcc.edu

Academic Advisor Contact Phone
313-317-6811

Academic Advisor Office Location
G-120J

School
Science, Tech, Engr & Math

Academic Department
Engineering Technology

Admissions Requirements

Admissions Requirements
Admission Requirements and Eligibility

In order to be admitted to this program, students are required to have successfully completed at least 15.0 credits in ACT, AUTO, CIMMT, CIMTA, CIMWD, CIS, DRAF, ELEC, ENGR, ENT, MFMT, MTT, PEFT, PLMB, REEN, TADV, TAEL, TAFD, TAFP, TAGD, TAIM, TAMA, TAMJ, TAMU TAMT, TAPI, TAPP, TAPT, or TASM. Approval by a counselor, an advisor, a student success navigator, or a faculty chair is required.

Program Learning Outcomes

Apply standard methods of mathematical analysis in problem solving.

Demonstrate the ability to work in a team environment in order to successfully follow an engineering design process and/or build a prototype.

Develop knowledge of career opportunities and demonstrate the technical skills required by industry.

Describe basic principles of design and problem-solving in the field of engineering technology.

Demonstrate professional ethics appropriate to the field of engineering and technology.

Demonstrate the ability to assist in troubleshooting a mechanical system.

What Classes do I take?

2-Year Plan
Engineering Technology: Mechanical - AAS: Recommended Sequence - Current
Total Credits
60 - 61
Description
Enrollment Status: Full Time

If you have questions about the order in which you should take these courses, or the availability of these courses, please contact your advisor or the faculty contact listed below.

Program Contact Information

Office Contact: School of Science, Technology, Engineering, and Mathematics (STEM): 313-845-9632, steminfo@hfcc.edu, Health Careers Education Ctr, Room: G-110, G-122 and J-115

Faculty Contact: Hassan Mohseni Nameghi: 313-317-1746, hnameghi@hfcc.edu, Science Bldg, Room: J-106B

Academic Advisor: Brandi Walthall-Johnson: 313-317-6811, bswalthall-johnson@hfcc.edu, Health Careers Bldg, Room: G-120J

For students in an older version of this program, please visit Henry Ford College Catalog Archive to view required courses.

Year	Semester	Semester Credits
Year 1	Fall	15

Courses
- ELEC103 - Basic Electricity

Semester Credits	4
Contact Hours	92

Courses
- ENGR130 - Introduction to Engineering

Semester Credits	3
Contact Hours	47

Courses
- MTT100 - Machine Tool Processes I

Semester Credits
4
Contact Hours
92

Courses
- CAT3 - Gen Ed Applied - 2025

Semester Credits
4
Contact Hours
62

Year	Semester	Semester Credits
Year 1	Winter	16

Courses
- CHEM131 - Principles of Chemistry

Semester Credits
4
Contact Hours
77

Courses
- ELEC200 - Ladder Diagrams & Motor Controls

Semester Credits
3
Contact Hours
62

Courses
- MTT140 - Introduction to CNC

Semester Credits
3
Contact Hours
62

Courses
- CAT1 - Gen Ed Applied - 2020

Semester Credits
3
Contact Hours
47

Courses
- BEC151 - Principles of Macroeconomics
  OR
- BEC152 - Principles of Microeconomics

Semester Credits
3
Contact Hours
47

Year	Semester	Semester Credits
Year 2	Fall	12 - 13

Courses
- ENGT245 - Applied Statics

Semester Credits
3
Contact Hours
62

Courses
- ENGR121 - Engineering Design and 3D Printing
  OR
- DRAF120 - Introduction to CAD

Semester Credits
3 - 4
Contact Hours
62 - 92

Courses
- ENGT265 - Mechanical Capstone Project

Semester Credits
3
Contact Hours
47

Courses
- CAT2 - Gen Ed Applied - 2020

Semester Credits
3
Contact Hours
47

Year	Semester	Semester Credits
Year 2	Winter	17

Courses
- ENGR125 - Introduction Computation for Engineers

Semester Credits
3
Contact Hours
62

Courses
- ENGT265 - Mechanical Capstone Project

Semester Credits
3
Contact Hours
47

Courses
- Automotive, Drafting, Machine Tool, Welding: Complete three (3) additional credits of 100-level, or higher, from Automotive (AUTO), Drafting (DRAF), Machine Tool (MTT), or Welding (CIMWD) courses. (Generic)

Semester Credits 3
Contact Hours 47

Courses
- ENGR201 - Science of Materials

Semester Credits 3
Contact Hours 47

Courses
- Electives: Complete additional 100-level, or higher, credits to complete this degree. (Generic)

Semester Credits 5
Contact Hours 77

Program Requirements

Minimum Credits for Program Completion
60
Minimum GPA required for Graduation
2.000
HFC Credit Hour Residency Requirement
20

Simple Requisites

Core Course Requirements

Engineering Technology - Mechanical AAS - Core Course Requirements
Type
Completion Requirement

Complete ALL of the following Courses:
- ENGR125-Intro Computation for Engineer 3 credits
- ENGR130-Intro to Engineering 3 credits
- ENGR201-Science of Materials 3 credits
- ENGT245-Applied Statics 3 credits
- ENGT265-Mechanical Capstone Project 3 credits
- MTT100-Machine Tool Processes I 4 credits
- MTT140-Introduction to CNC 3 credits
- ELEC103-Basic Electricity 4 credits
- ELEC200-Lad Diag & Mot Cntl 3 credits

Drafting and Design

Complete at least 1 of the following courses:
- ENGR121-Engin Design & 3D Printing 3 credits
  OR DRAF120-Intro to CAD 4 credits

Complete three (3) additional credits of 100-level or higher, Automotive (AUTO), Drafting (DRAF), or Machine Tool (MTT) courses from the options listed.

Automotive, Drafting, Machine Tool

Support Course Requirements

Engineering Technology - Mechanical AAS - Support Course Requirements
Type
Completion Requirement

Category 3: Mathematics

Complete at least 1 of the following courses:
- **OR** MATH110-Intermediate Algebra 4 credits
  OR MATH115-College Algebra 5 credits
  OR MATH165-Mathematics for Calculus 6 credits
  OR MATH175-Precalculus 5 credits
  OR MATH180-Calculus 1 5 credits
  OR MATH183-Calculus II 5 credits
  OR MATH275-Discrete Mathematics 4 credits
  OR MATH280-Calculus III 5 credits
  OR MATH288-Differential Equations 5 credits

Category 6: Natural Science

Complete ALL of the following Courses:
- CHEM131-Principles of Chemistry 4 credits

Category 4: Social Science

Complete at least 1 of the following courses:
- BEC151-Prin Macro Economics 3 credits
  OR BEC152-Prin Micro Economics 3 credits

Elective Hours

Associate in Applied Science (AAS) degrees require a minimum of 60 credits for graduation. Complete additional 100-level, or higher, courses to complete the requirements for this degree.

Earn at least 8 credits

General Education Requirements

Engineering Technology - Mechanical AAS - General Education Course Requirements
Type
Completion Requirement

Category 1: English Composition

Complete at least 1 courses in the following course sets:
- CAT1 - Gen Ed Applied - 2020

Category 2: English Composition or Communications

Complete at least 1 courses in the following course sets:
- CAT2 - Gen Ed Applied - 2020

Additional Comments:
See General Education Requirements for Applied Degrees for details.

ELECENGINTECH.AAS - Electrical Engineering Technology

Program Information

Program Title
Electrical Engineering Technology

Program Code
ELECENGINTECH.AAS

Degree Type
Associate in Applied Science

Minimum Credits for Program Completion
62

Program Eligible for Financial Aid?
Yes

Subject
Electrical Engineering Technol

Semesters to Complete Program
5

Program Description
Introduces the basic principles of electricity and proceeds to the concepts of solid state components such as diodes, transistors, integrated circuits, and microprocessor systems. Advanced courses show how these fundamental principles are applied to machine control, computers, power supplies, amplifiers, oscillators, industrial control, and instrumentation systems. Courses simulate actual working conditions in five fully-equipped laboratories where students put electrical-electronics theory into practice. Along with laboratory experiences setting up circuits, troubleshooting, and calibrating systems, computer-simulated circuit analysis is used in the majority of the courses.

Faculty Contact
Massimo Pizzino

Faculty Contact Email
mfpizzino@hfcc.edu

Faculty Contact Phone
313-845-9814

Faculty Contact Office Location
E-115D

Academic Advisor
Rachel Vanzutphen

Academic Advisor Contact Email
rvanzutphen@hfcc.edu

Academic Advisor Contact Phone
313-845-9873

Academic Advisor Office Location
E-211L

School
Business, Entrepreneurship, PD

Academic Department
Advanced Manufacturing

Program Learning Outcomes

- Apply laws to the design, construction, analysis, and measurement of electric, hydraulic, and pneumatic circuits.
- Interpret and develop technical drawings, schematics, and diagrams.
- Create documents based on technical information using descriptive writing, diagrams, mathematical expression, computation, and graphs.
- Perform electrical/mechanical assembly/disassembly, repair, troubleshoot, and calibration of components and devices.
- Apply electrical/mechanical laws to the operation and control of machines.
- Apply critical thinking skills to solving electro-mechanical problem.
- Communicate and perform effectively within a team environment.
- Develop PLC, HMI, and robot programs for the control of electro-mechanical systems.
- Analyze a set of specifications and create a LabView virtual instrument.
- Apply electro-mechanical laws to the application of specific industrial sensors/transducers.
- Evaluate sensor/transducer output based on computer generated data for the purpose of creating a lab report using Microsoft Office products.

What Classes do I take?

2-Year Plan
Electrical Engineering Technology - AAS: Recommended Sequence - Current
Total Credits
62
Description
Enrollment Status: Full Time

If you have questions about the order in which you should take these courses, or the availability of these courses, please contact your advisor or the faculty contact listed below.

Electrical Technology Support: Complete 10 additional credits from:

Automotive (AUTO), Computer Information Systems (CIS), Computer Networking (CNT), Electrical/Electronics (ELEC), Engineering (ENGR), Industrial Drafting (DRAF), Machine Tool Technology (MTT), Welding (CIMWD)

Program Contact Information

Office Contact: School of Business, Entrepreneurship, and Professional Development: 313-845-9645, bepdinfo@hfcc.edu, Technology Bldg, Room: E-211

Faculty Contact: Massimo Pizzino: 313-845-9814, mfpizzino@hfcc.edu, Technology Bldg, Room: E-115D

Academic Advisor: Rachel Vanzutphen: 313-845-9873, rvanzutphen@hfcc.edu, Technology Bldg, Room: E-211L

For students in an older version of this program, please visit Henry Ford College Catalog Archive to view required courses.

Year	Semester	Semester Credits
Year 1	Fall	13

Courses
- ELEC103 - Basic Electricity

Semester Credits 4
Contact Hours 92

Courses
- ELEC161 - Fluid/Pneumatic Power Systems Certificat

Semester Credits 3
Contact Hours 62

Courses
- Electrical Technology Support: Complete at least 3 credits from the following course prefixes: AUTO, CHEM, ENGR, MTT, DRAF (Generic)

Semester Credits 3
Contact Hours 47

Courses
- ENG131 - Introduction to College Writing

Semester Credits 3
Contact Hours 47

Year	Semester	Semester Credits
Year 1	Winter	12

Courses
- ELEC106 - Basic Electronics

Semester Credits 3
Contact Hours 62

Courses
- ELEC115 - Digital Circuits 1

Semester Credits 3
Contact Hours 62

Courses
- ELEC200 - Ladder Diagrams & Motor Controls

Semester Credits 3
Contact Hours 62

Courses
- ELEC145 - AC/DC Rotating Machinery

Semester Credits 3
Contact Hours 62

Year	Semester	Semester Credits
Year 1	Summer	9

Courses
- CAT4 - Gen Ed Applied - 2020

Semester Credits 3
Contact Hours 47

Courses
- CAT3 - Gen Ed Applied - 2025

Semester Credits 3
Contact Hours 47

Courses
- ENG132 - College Writing and Research
  OR
- ENG132H - Honors College Writing and Research
  OR
- ENG135 - Business & Technical Writing & Research

Semester Credits 3
Contact Hours 47

Year	Semester	Semester Credits
Year 2	Fall	16

Courses
- ELEC195 - AC/DC Circuit Analysis

Semester Credits 3
Contact Hours 62

Courses
- ELEC235 - Siemens PLC/HMI Programming

Semester Credits 3
Contact Hours 62

Courses
- ELEC255 - Instrumentation Systems

Semester Credits 3
Contact Hours 62

Courses
- CIS100 - Introduction to Information Technology

Semester Credits 3
Contact Hours 47

Courses
- Electrical Technology Support: Complete at least 4 credits from courses with the following prefixes: AUTO, CHEM, ENGR, MTT, DRAF (Generic)

Semester Credits 4
Contact Hours 62

Year	Semester	Semester Credits
Year 2	Winter	12

Courses
- ELEC245 - Programmable Controllers

Semester Credits
3
Contact Hours
62

Courses
- ELEC260 - Automation Controls and Robotics

Semester Credits
3
Contact Hours
62

Courses
- ELEC270 - Instrumentation II LabVIEW Programming

Semester Credits
3
Contact Hours
62

Courses
- Electrical Technology Support: Complete at least 3 credits from courses with the following prefixes: AUTO, CHEM, ENGR, MTT, DRAF (Generic)

Semester Credits
3
Contact Hours
47

Program Requirements

Minimum Credits for Program Completion
62

Minimum GPA required for Graduation
2.000

HFC Credit Hour Residency Requirement
20

Simple Requisites

Core Course Requirements

Electrical Engineering Technology AAS - Core Course Requirements
Type
Completion Requirement

Complete ALL of the following Courses:
- ELEC103-Basic Electricity 4 credits
- ELEC106-Basic Electronics 3 credits
- ELEC115-Digital Circuits 1 3 credits
- ELEC145-AC/DC Rotating Machinery 3 credits
- ELEC195-AC/DC Circuit Analysis 3 credits
- ELEC200-Lad Diag & Mot Cntl 3 credits
- ELEC235-Siemens PLC/HMI Programming 3 credits
- ELEC245-Programmable Controllers 3 credits
- ELEC255-Instrumentation Systems 3 credits
- ELEC260-Automation Controls & Robotics 3 credits
- ELEC270-Instrumentation II LabVIEW Pr 3 credits
- ELEC161-Fluid/Pneumatic Ps Cert 3 credits

Support Course Requirements

Electrical Engineering Technology AAS - Support Course Requirements
Type
Completion Requirement

Category 2: English Composition or Communications

Complete ALL of the following Courses:
- ENG132-College Writing and Research 3 credits
  OR ENG132H-Honors Coll Writing & Research 3 credits
  OR ENG135-Bus & Tech Writing & Research 3 credits

Computer Technoloy

Complete ALL of the following Courses:
- CIS100-Intro Info Tech 3 credits

Electrical Technology Support

- Automotive (AUTO), Chemistry (CHEM), Computer Information Systems (CIS), Computer Networking (CNT), Electrical/ Electronics (ELEC), Engineering (ENGR), Industrial Drafting (DRAF), Machine Tool Technology (MTT), Welding (CIMWD)

Earn at least 10 credits

General Education Requirements

Electrical Engineering Technology AAS - General Education Course Requirements
Type
Completion Requirement

Category 1: English Composition

Complete ALL of the following Courses:
- ENG131-Introduction College Writing 3 credits

Category 3: Mathematics

Complete at least 1 courses in the following course sets:
- CAT3 - Gen Ed Applied - 2025

Category 4: Social Sciences

Complete at least 1 courses in the following course sets:
- CAT4 - Gen Ed Applied - 2020

Additional Comments:
See General Education Requirements for Applied Degrees for details.

ELECENGINTECH.CA - Electrical Engineering Technology

Program Information

Program Title
Electrical Engineering Technology

Program Code
ELECENGINTECH.CA

Degree Type
Certificate of Achievement

Minimum Credits for Program Completion
25

Program Eligible for Financial Aid?
Yes

Subject
Electrical Engineering Technol

Semesters to Complete Program
4

Program Description
This certificate can be used as documentation to show a student has reached a certain level of proficiency in Electrical Engineering Technology. This certificate can be earned while pursuing an Associate in Applied Science degree in Electrical Technology. Electrical Engineering Technology articulation agreements are also available to certain 4 year universities. To earn this certificate there is approximately 50% hands on lab work and 50% theory involved. Students will receive training in basic electricity, the proper use of test equipment, motors, generators, semiconductors, digital electronics, control circuits, circuit calculations, hydraulic, pneumatics and troubleshooting.

Faculty Contact
Massimo Pizzino

Faculty Contact Email
mfpizzino@hfcc.edu

Faculty Contact Phone
313-845-7170

Faculty Contact Office Location
E-115D

Academic Advisor
Rachel VanZutphen

Academic Advisor Contact Email
rvanzutphen@hfcc.edu

Academic Advisor Contact Phone
313-845-9873

Academic Advisor Office Location
E-211L

School
Business, Entrepreneurship, PD

Academic Department
Advanced Manufacturing

Program Learning Outcomes

Demonstrate the ability to apply laws to the design, construction, analysis, and measurement of electric, hydraulic and pneumatic circuits.

Interpret and develop technical drawing, schematics and diagrams.

Create documents based on technical information using descriptive writing, diagrams, mathematical expression, computation, and graphs.

Apply electrical/mechanical laws to the operation and control of machines.

Apply critical thinking skills to solving problems.

Demonstrate the ability to communicate and perform in a team environment.

Analyze a set of specifications and create a LabView virtual instrument.

Apply electro/mechanical output based on computer generated data for the purpose of creating a lab manual using Microsoft Office products.

What Classes do I take?

2-Year Plan
Electrical Engineering Technology - CA: Recommended Sequence - Current
Total Credits
25
Description
Enrollment Status: Full Time

If you have questions about the order in which you should take these courses, or the availability of these courses, please contact your advisor or the faculty contact listed below.

Program Contact Information

Office Contact: School of Business, Entrepreneurship, and Professional Development: 313-845-9645, bepdinfo@hfcc.edu, Technology Bldg, Room: E-211

Faculty Contact: Massimo Pizzino: 313-845-9814, mfpizzino@hfcc.edu, Technology Bldg, Room: E-115D

Academic Advisor: Rachel Vanzutphen: 313-845-9873, rvanzutphen@hfcc.edu, Technology Bldg, Room: E-211L

For students in an older version of this program, please visit Henry Ford College Catalog Archive to view required courses.

Year	Semester	Semester Credits
Year 1	Fall	7

Courses
- ELEC103 - Basic Electricity

Semester Credits 4
Contact Hours 92

Courses
- ELEC185 - Pneumatics

Semester Credits 3
Contact Hours 62

Year	Semester	Semester Credits
Year 1	Winter	6

Courses
- ELEC115 - Digital Circuits 1

Semester Credits 3
Contact Hours 62

Courses
- ELEC145 - AC/DC Rotating Machinery

Semester Credits
3
Contact Hours
62

Year	Semester	Semester Credits
Year 2	Fall	6

Courses
- ELEC195 - AC/DC Circuit Analysis

Semester Credits
3
Contact Hours
62

Courses
- ELEC200 - Ladder Diagrams & Motor Controls

Semester Credits
3
Contact Hours
62

Year	Semester	Semester Credits
Year 2	Winter	6

Courses
- ELEC120 - Basic Hydraulics

Semester Credits
3
Contact Hours
62

Courses
- ELEC265 - Basic Troubleshooting 101

Semester Credits
3
Contact Hours
62

Program Requirements

Minimum Credits for Program Completion
25

Minimum GPA required for Graduation
2.000

HFC Credit Hour Residency Requirement
20

Simple Requisites

Core Course Requirements

Electrical Engineering Technology CA - Core Course Requirements
Type
Completion Requirement

Complete ALL of the following Courses:
- ELEC103-Basic Electricity 4 credits
- ELEC115-Digital Circuits 1 3 credits
- ELEC120-Basic Hydraulics 3 credits
- ELEC145-AC/DC Rotating Machinery 3 credits
- ELEC185-Pneumatics 3 credits
- ELEC200-Lad Diag & Mot Cntl 3 credits
- ELEC195-AC/DC Circuit Analysis 3 credits
- ELEC265-Basic Troubleshooting 101 3 credits

ENGIN.AS - Pre-Engineering: General

Program Information

Program Title
Pre-Engineering AS Degree

Program Code
ENGIN.AS

Degree Type
Associate in Science

Minimum Credits for Program Completion
60

Program Eligible for Financial Aid?
Yes

Subject
Pre-Engineering

Semesters to Complete Program
4

Program Description
The Pre-Engineering program covers the courses in the first two years of an engineering degree (Bachelor of Science). Students take basic physics and math courses as well as general education courses required by most of engineering schools. Upon completion of program, successful students can transfer to a 4-year institution to complete their final two years of engineering. The articulation agreements with some schools in Michigan make the transfer of our graduates easier.
NOTE: Because the elective courses required for the various fields of engineering may vary slightly, students should meet with the Engineering Faculty Advisor for assistance with registering for the correct series of courses.

Faculty Contact
Hassan Nameghi

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Faculty Contact Phone
313-317-1746

Faculty Contact Office Location
J-106B

Academic Advisor
Brandi Walthall-Johnson

Academic Advisor Contact Email
bswalthall-johnson@hfcc.edu

Academic Advisor Contact Phone
313-317-6811

Academic Advisor Office Location
G-120J

School
Science, Tech, Engr & Math

Academic Department
Engineering Technology

Program Learning Outcomes

An ability to identify, formulate, and solve engineering problems by applying principles of science and mathematics.

Demonstrate the ability to work in a team environment in order to successfully follow a design process and/or build a prototype.

Use a computational engineering programming tool to solve engineering problems.

Demonstrate professional ethics appropriate to the field of engineering.

Define the roles of different engineers and decide his/her engineering major/school.

What Classes do I take?

2-Year Plan
Pre-Engineering: General - AS: Recommended Sequence - Current
Total Credits
60
Description
If you have questions about the order in which you should take these courses, or the availability of these courses, please contact your advisor or the faculty contact listed below.

Program Contact Information

Office Contact: School of Science, Technology, Engineering, and Mathematics (STEM): 313-845-9632, steminfo@hfcc.edu, Health Careers Education Ctr, Room: G-110, G-122 and J-115

Faculty Contact: Hassan Mohseni Nameghi: 313-317-1746, hnameghi@hfcc.edu, Science Bldg, Room: J-106B

Academic Advisor: Brandi Walthall-Johnson: 313-317-6811, bswalthall-johnson@hfcc.edu, Health Careers Bldg, Room: G-120J

For students in an older version of this program, please visit Henry Ford College Catalog Archive to view required courses.

Year	Semester	Semester Credits
Year 1	Fall	16

Courses
- CHEM141 - Principles Gen & Inorganic Chemistry I

Semester Credits 5
Contact Hours 107

Courses
- ENG131 - Introduction to College Writing

Semester Credits 3
Contact Hours 47

Courses
- ENGR130 - Introduction to Engineering

Semester Credits 3
Contact Hours 47

Courses
- MATH180 - Calculus I

Semester Credits 5
Contact Hours 77

Year	Semester	Semester Credits
Year 1	Winter	16

Courses
- MATH183 - Calculus II

Semester Credits 5
Contact Hours 77

Courses
- PHYS231 - Engineering Physics I

Semester Credits
5
Contact Hours
107

Courses
- ENG135 - Business & Technical Writing & Research

Semester Credits
3
Contact Hours
47

Courses
- ENGR125 - Introduction Computation for Engineers

Semester Credits
3
Contact Hours
62

Year	Semester	Semester Credits
Year 2	Fall	14

Courses
- MATH280 - Calculus III

Semester Credits
5
Contact Hours
77

Courses
- PHYS232 - Engineering Physics II

Semester Credits
5
Contact Hours
107

Courses
- CAT5 - Gen Ed Transfer - 2025

Semester Credits
3
Contact Hours
47

Courses
- Electives: Complete additional 100-level, or higher, credits to complete this degree. (Generic)

Semester Credits
1
Contact Hours
16

Year	Semester	Semester Credits
Year 2	Winter	14

Courses
- MATH288 - Differential Equations

Semester Credits
5
Contact Hours
77

Courses
- CAT4 - Gen Ed Transfer - 2020

Semester Credits
3
Contact Hours
47

Courses
- CAT5 - Gen Ed Transfer - 2025

Semester Credits
3
Contact Hours
47

Courses
- BEC151 - Principles of Macroeconomics
  OR
- BEC152 - Principles of Microeconomics

Semester Credits
3
Contact Hours
47

Program Requirements

Minimum Credits for Program Completion
60

Minimum GPA required for Graduation
2.000

HFC Credit Hour Residency Requirement
20

Simple Requisites

Core Course Requirements

Pre-Engineering AS - Core Course Requirements
Type
Completion Requirement

Complete ALL of the following Courses:
- CHEM141-Prin Gen & Inorgan Chem I 5 credits
- PHYS231-Engineering Physics I 5 credits
- PHYS232-Engineering Physics II 5 credits
- MATH180-Calculus 1 5 credits
- MATH183-Calculus II 5 credits
- MATH280-Calculus III 5 credits
- MATH288-Differential Equations 5 credits
- ENGR130-Intro to Engineering 3 credits
- ENGR125-Intro Computation for Engineer 3 credits

Support Course Requirements

Pre-Engineering AS - Support Course Requirements
Type
Completion Requirement

Category 1: English Composition

Complete ALL of the following Courses:
- ENG131-Introduction College Writing 3 credits

Category 2: English Composition or Communications

Complete ALL of the following Courses:
- ENG135-Bus & Tech Writing & Research 3 credits

Category 4: Social Sciences

Complete at least 1 of the following courses:
- BEC151-Prin Macro Economics 3 credits
  OR BEC152-Prin Micro Economics 3 credits

Complete additional 100-level, or higher, credits to complete this degree.

Earn at least 1 credits

General Education Requirements

Pre-Engineering AS - General Education Course Requirements
Type
Completion Requirement

Category 4: Social Sciences

Complete any one, from a different discipline (other than BEC), from the General Education Requirements for Transfer Degrees (MTA) list.

Complete at least 1 courses in the following course sets:
- CAT4 - Gen Ed Transfer - 2020

Category 5: Humanities and Fine Arts

Complete any two, from different disciplines, from the General Education Requirements for Transfer Degrees (MTA) list.

Complete at least 2 courses in the following course sets:
- CAT5 - Gen Ed Transfer - 2025

Additional Comments:
See General Education Requirements for Transfer Degrees for details.

ENGPTH.MECHELEC.AS - Engineering Technology Pathway: Mechanical/Electrical

Program Information

Program Title
Engineering Tech Pathway: Mechanical/Electrical

Program Code
ENGPTH.MECHELEC.AS

Degree Type
Associate in Science

Minimum Credits for Program Completion
61

Program Eligible for Financial Aid?
Yes

Subject
Pre-Engineering

Semesters to Complete Program
4

Program Description
The Engineering Pathway: Mechanical/Electrical program addresses the science, mathematics, general education, and specialized technology courses required by the Bachelor Degree of Engineering Technology at Wayne State University (WSU). It is designed to help students with a background in technology take additional required courses before transferring to WSU. Upon successful completion of this pathway program, students can transfer to Wayne State University to complete their final year in Mechanical Engineering Technology or Electrical Engineering Technology.

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Faculty Contact Office Location
J-106B

Academic Advisor
Brandi Walthall-Johnson

Academic Advisor Contact Email
bswalthall-johnson@hfcc.edu

Academic Advisor Contact Phone
313-317-6811

Academic Advisor Office Location
G-120J

School
Science, Tech, Engr & Math

Academic Department
Engineering Technology

Admissions Requirements

Admissions Requirements
Admission Requirements and Eligibility

In order to be admitted to this program, students are required to have successfully completed at least 15.0 credits in ACT, AUTO, CIMMT, CIMTA, CIMWD, CIS, DRAF, ELEC, ENGR, ENT, MFMT, MTT, PEFT, PLMB, REEN, TADV, TAEL, TAFD, TAFP, TAGD, TAIM, TAMA, TAMJ, TAMU TAMT, TAPI, TAPP, TAPT, or TASM. Approval by a counselor, an advisor, a student success navigator, or a faculty chair is required.

Program Learning Outcomes

Describe the introductory concepts of college physical sciences (chemistry and physics).

Demonstrate the ability to work in a team to solve introductory technology and math problems.

Define the roles of mechanical/electrical engineering technologists and decide his/her pathway.

What Classes do I take?

2-Year Plan
Engineering Technology Pathway: Mechanical/Electrical - AS: Recommended Sequence - 2022-2023
Total Credits
60
Description
Note: Students will complete either the **Electrical Engineering Technology** or the **Mechanical Engineering Technology** courses depending on their pathway.

Enrollment Status: Full Time

If you have questions about the order in which you should take these courses, or the availability of these courses, please contact your advisor or the faculty contact listed below.

Program Contact Information

Office Contact: School of Science, Technology, Engineering, and Mathematics (STEM): 313-845-9632, steminfo@hfcc.edu, Health Careers Education Ctr, Room: G-110, G-122 and J-115

Faculty Contact: Hassan Mohseni Nameghi: 313-317-1746, hnameghi@hfcc.edu, Science Bldg, Room: J-106B

Academic Advisor: Brandi Walthall-Johnson: 313-317-6811, bswalthall-johnson@hfcc.edu, Health Careers Bldg, Room: G-120J

For students in an older version of this program, please visit Henry Ford College Catalog Archive to view required courses.

Year	Semester	Semester Credits
Year 1	Fall	15

Courses
- CHEM131 - Principles of Chemistry

Semester Credits
4
Contact Hours
77

Courses
- ENG131 - Introduction to College Writing

Semester Credits
3
Contact Hours
47

Courses
- MATH175 - Precalculus

Semester Credits
5
Contact Hours
77

Courses
- CAT3 - Gen Ed Applied - 2025

Semester Credits
3
Contact Hours
47

Year	Semester	Semester Credits
Year 1	Winter	16

Courses
- ELEC103 - Basic Electricity

Semester Credits 4
Contact Hours 92

Courses
- MATH180 - Calculus I

Semester Credits 5
Contact Hours 77

Courses
- PHYS131 - General Physics I

Semester Credits 4
Contact Hours 92

Courses
- CAT4 - Gen Ed Applied - 2020

Semester Credits 3
Contact Hours 47

Year	Semester	Semester Credits
Year 2	Fall	14

Courses
- CIS170 - C Programming

Semester Credits 3
Contact Hours 62

Courses
- MTT100 - Machine Tool Processes I

Semester Credits 4
Contact Hours 92

Courses
- PHYS132 - General Physics II

Semester Credits 4
Contact Hours 92

Courses
- ELEC245 - Programmable Controllers
  OR
- DRAF110 - Introduction to Industrial Drafting

Semester Credits 3
Contact Hours 62 - 77

Year	Semester	Semester Credits
Year 2	Winter	15

Courses
- CIS100 - Introduction to Information Technology

Semester Credits 3
Contact Hours 47

Courses
- ENG135 - Business & Technical Writing & Research

Semester Credits 3
Contact Hours 47

Courses
- PHIL139 - Ethics

Semester Credits 3
Contact Hours 47

Courses
- BEC151 - Principles of Macroeconomics
  OR
- BEC152 - Principles of Microeconomics

Semester Credits 3
Contact Hours 47

Courses
- ELEC115 - Digital Circuits 1
  OR
- ENGR201 - Science of Materials

Semester Credits 3
Contact Hours 47 - 62

2-Year Plan
Engineering Tech Pathway: Mechanical/Electrical - AS: Recommended Sequence - Current
Total Credits
60 - 61
Description
Enrollment Status: Full Time

If you have questions about the order in which you should take these courses, or the availability of these courses, please contact your advisor or the faculty contact listed below.

Program Contact Information

Office Contact: School of Science, Technology, Engineering, and Mathematics (STEM): 313-845-9632, steminfo@hfcc.edu, Health Careers Education Ctr, Room: G-110, G-122 and J-115

Faculty Contact: Hassan Mohseni Nameghi: 313-317-1746, hnameghi@hfcc.edu, Science Bldg, Room: J-106B

Academic Advisor: Brandi Walthall-Johnson: 313-317-6811, bswalthall-johnson@hfcc.edu, Health Careers Bldg, Room: G-120J

For students in an older version of this program, please visit Henry Ford College Catalog Archive to view required courses.

Year	Semester	Semester Credits
Year 1	Fall	15 - 16

Courses
- CHEM131 - Principles of Chemistry

Semester Credits
4
Contact Hours
77

Courses
- ENG131 - Introduction to College Writing

Semester Credits
3
Contact Hours
47

Courses
- MATH165 - Mathematics for Calculus
  OR
- MATH175 - Precalculus

Semester Credits
5 - 6
Contact Hours
77 - 92

Courses
- CAT5 - Gen Ed Transfer - 2025

Semester Credits
3
Contact Hours
47

Year	Semester	Semester Credits
Year 1	Winter	16

Courses
- ELEC103 - Basic Electricity

Semester Credits
4
Contact Hours
92

Courses
- MATH180 - Calculus I

Semester Credits
5
Contact Hours
77

Courses
- PHYS131 - General Physics I

Semester Credits
4
Contact Hours
92

Courses
- CAT4 - Gen Ed Transfer - 2020

Semester Credits
3
Contact Hours
47

Year	Semester	Semester Credits
Year 2	Fall	14

Courses
- ENGR130 - Introduction to Engineering

Semester Credits
3
Contact Hours
47

Courses
- MTT100 - Machine Tool Processes I

Semester Credits
4
Contact Hours
92

Courses
- PHYS132 - General Physics II

Semester Credits
4
Contact Hours
92

Courses
- ELEC245 - Programmable Controllers
  OR
- DRAF110 - Introduction to Industrial Drafting

Semester Credits
3
Contact Hours
62 - 77

Year	Semester	Semester Credits
Year 2	Winter	15

Courses
- ENGR125 - Introduction Computation for Engineers

Semester Credits
3
Contact Hours
62

Courses
- ENG135 - Business & Technical Writing & Research

Semester Credits 3
Contact Hours 47

Courses
- BEC151 - Principles of Macroeconomics
  OR
- BEC152 - Principles of Microeconomics

Semester Credits 3
Contact Hours 47

Courses
- ELEC115 - Digital Circuits 1

Semester Credits 3
Contact Hours 62

Courses
- ENGR201 - Science of Materials

Semester Credits 3
Contact Hours 47

Program Requirements

Minimum Credits for Program Completion
61
Minimum GPA required for Graduation
2.000
HFC Credit Hour Residency Requirement
20

Simple Requisites

Core Course Requirements

Engineering Tech Pathway: Mechanical/Electrical AS - Core Course Requirements
Type
Completion Requirement

Complete ALL of the following Courses:
- ENGR130-Intro to Engineering 3 credits
- ENGR125-Intro Computation for Engineer 3 credits
- ELEC103-Basic Electricity 4 credits
- MTT100-Machine Tool Processes I 4 credits
- CHEM131-Principles of Chemistry 4 credits
- PHYS131-General Physics I 4 credits
- PHYS132-General Physics II 4 credits

Category 3: Mathematics

Complete at least 1 of the following courses:
- MATH165-Mathematics for Calculus 6 credits
  OR MATH175-Precalculus 5 credits

Category 3: Mathematics

Complete ALL of the following Courses:
- MATH180-Calculus 1 5 credits

Support Course Requirements

Engineering Tech Pathway: Mechanical/Electrical AS - Support Course Requirements
Type
Completion Requirement

Category 1: English Composition

Complete ALL of the following Courses:
- ENG131-Introduction College Writing 3 credits

Category 2: English Composition or Communications

Complete ALL of the following Courses:
- ENG135-Bus & Tech Writing & Research 3 credits

Category 5: Humanities and Fine Arts

Complete ALL of the following Courses:
- PHIL139-Ethics 3 credits

Pathway: Complete both courses (6 credits) in either Electrical Engineering Technology or Mechanical Engineering Technology.

Earn at least 6 credits from the following:
- ELEC115-Digital Circuits 1 3 credits
  AND ELEC245-Programmable Controllers 3 credits
- DRAF110-Intro Industrial Drafting 3 credits
  OR ENGR201-Science of Materials 3 credits

Note: Students will complete either the Electrical Engineering Technology or the Mechanical Engineering Technology courses depending on their pathway.

General Education Requirements

Engineering Tech Pathway: Mechanical/Electrical AS - General Education Course Requirements
Type
Completion Requirement

Category 4: Social Sciences

Complete any two, from different disciplines, from the General Education Requirements for Transfer Degrees (MTA) list.

Complete at least 2 courses in the following course sets:
- CAT4 - Gen Ed Transfer - 2020

Category 5: Humanities and Fine Arts

Complete any one, from a different discipline (other than PHIL), from the General Education Requirements for Transfer Degrees (MTA) list.

Complete at least 1 courses in the following course sets:
- CAT5 - Gen Ed Transfer - 2025

Additional Comments:
See General Education Requirements for Transfer Degrees for details.

ENVIRN.AS - Environmental Studies

Program Information

Program Title
Environmental Studies AS Degree

Program Code
ENVIRN.AS

Degree Type
Associate in Science

Minimum Credits for Program Completion
60

Program Eligible for Financial Aid?
Yes

Subject
Environmental Studies

Semesters to Complete Program
4

Program Description
Emphasizes the interdisciplinary nature of environmental problem-solving at the local, regional, and international levels. Students completing this program can transfer to bachelor programs in four broad areas: land resources, nature studies, resource and policy management, and urban service.

Faculty Contact
Mary Parekunnel

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Faculty Contact Phone
313-317-1747

Faculty Contact Office Location
J-152

Academic Advisor
Elyse Hogan

Academic Advisor Contact Email
echogan@hfcc.edu

Academic Advisor Contact Phone
313-845-9730

Academic Advisor Office Location
J-114A

School
Science, Tech, Engr & Math

Academic Department
Biological Sciences

Program Learning Outcomes

Demonstrate proficiency in designing an experiment in the lab settings and in the field and conducting experiment, collecting data, analyzing, interpreting and presenting results individually and in a team setting.

Recognize different ecosystems, the components of ecosystems and explain the relationships among them.

Demonstrate a basic understanding of Earth's weather and climate and the forces that influence them.

Explain geological processes that affect the earth.

Show proficiency in the use of basic laboratory and field equipment and basic knowledge of safe lab procedures.

Write formal reports using a standard format.

Interpret topographic maps.

Demonstrate basic knowledge on unsustainable use of resources by humans and subsequent harmful impacts on environment especially environmental pollution.

What Classes do I take?

2-Year Plan
Environmental Studies - AS: Recommended Sequence - Current
Total Credits
60 - 62
Description
Enrollment Status: Full Time

If you have questions about the order in which you should take these courses, or the availability of these courses, please contact your advisor or the faculty contact listed below.

Program Contact Information

Office Contact: School of Science, Technology, Engineering, and Mathematics (STEM): 313-845-9632, steminfo@hfcc.edu, Health Careers Education Ctr, Room: G-110, G-122 and J-115

Faculty Contact: Mary Parekunnel: 313-317-1747, mparekunnel@hfcc.edu, Science Bldg, Room: J-152

Academic Advisor: Elyse Hogan: 313-845-9730, echogan@hfcc.edu, Science Bldg, Room: J-114A

For students in an older version of this program, please visit Henry Ford College Catalog Archive to view required courses.

Year	Semester	Semester Credits
Year 1	Fall	16

Courses
- BIO138 - Environmental Science Lecture

Semester Credits 3
Contact Hours 47

Courses
- CIS100 - Introduction to Information Technology

Semester Credits 3
Contact Hours 47

Courses
- GEOL131 - Physical Geology

Semester Credits 4
Contact Hours 77

Courses
- ENG131 - Introduction to College Writing
  OR
- ENG131H - Honors Introduction to College Writing

Semester Credits 3
Contact Hours 47

Courses
- CAT5 - Gen Ed Transfer - 2025

Semester Credits 3
Contact Hours 47

Year	Semester	Semester Credits
Year 1	Winter	13 - 15

Courses
- BIO139 - Environmental Science Laboratory

Semester Credits 2
Contact Hours 45

Courses
- BIO150 - Biology: Organisms, Genes, and Ecology

Semester Credits 4
Contact Hours 92

Courses
- ENG132 - College Writing and Research
  OR
- ENG132H - Honors College Writing and Research
  OR
- ENG135 - Business & Technical Writing & Research

Semester Credits 3
Contact Hours 47

Courses
- CAT3 - Coll Algebra - Gen Ed Transfer - 2020
  OR
- CAT3 - Quant Lit - Gen Ed Transfer - 2025
  OR
- CAT3 Stats - Gen Ed Transfer - 2025

Semester Credits 4 - 6
Contact Hours 62 - 92

Year	Semester	Semester Credits
Year 2	Fall	16

Courses
- BIO130 - Evolution and Behavior

Semester Credits 4
Contact Hours 62

Courses
- CHEM141 - Principles Gen & Inorganic Chemistry I

Semester Credits 5
Contact Hours 107

Courses
- GEOG131 - Environmental Geography

Semester Credits 4
Contact Hours 62

Courses
- CAT5 - Gen Ed Transfer - 2025

Semester Credits 3
Contact Hours 47

Year	Semester	Semester Credits
Year 2	Winter	15

Courses
- ATMS131 - Weather and Climate

Semester Credits 3
Contact Hours 47

Courses
- BEC152 - Principles of Microeconomics

Semester Credits 3
Contact Hours 47

Courses
- GEOG132 - World Regional Geography

Semester Credits 3
Contact Hours 47

Courses
- Electives: Complete additional 100-level, or higher, credits to complete this degree. (Generic)

Semester Credits 6
Contact Hours 94

Program Requirements

Minimum Credits for Program Completion
60

Minimum GPA required for Graduation
2.000

HFC Credit Hour Residency Requirement
20

Simple Requisites

Core Course Requirements

Environmental Studies AS - Core Course Requirements

Type
Completion Requirement

Complete ALL of the following Courses:
- BIO138-Environmental Science Lecture 3 credits
- BIO139-Environmental Science Lab 2 credits
- BIO150-Bio: Organisms, Genes, Ecology 4 credits
- CHEM141-Prin Gen & Inorgan Chem I 5 credits
- GEOG131-Environmental Geography 4 credits
- GEOL131-Physical Geology 4 credits
- ATMS131-Weather and Climate 3 credits

Support Course Requirements

Environmental Studies AS - Support Course Requirements
Type
Completion Requirement

Category 1: English Composition

Complete ALL of the following Courses:
- ENG131-Introduction College Writing 3 credits

Category 2: English Composition or Communications

Complete at least 1 of the following courses:
- ENG132-College Writing and Research 3 credits
  OR ENG132H-Honors Coll Writing & Research 3 credits
  OR ENG135-Bus & Tech Writing & Research 3 credits

Support Courses

Complete ALL of the following Courses:
- BEC152-Prin Micro Economics 3 credits
- BIO130-Evolution and Behavior 4 credits
- GEOG132-World Regional Geography 3 credits

Electives

Complete additional 100-level, or higher, credits to complete this degree.

Earn at least 6 credits

General Education Requirements

Environmental Studies AS - General Education Course Requirements
Type
Completion Requirement

Category 3: Mathematics

Complete at least 1 courses in the following course sets:
- CAT3 - Coll Algebra - Gen Ed Transfer - 2020
- CAT3 - Quant Lit - Gen Ed Transfer - 2025
- CAT3 Stats - Gen Ed Transfer - 2025

Category 5: Humanities and Fine Arts

Complete any two, from different disciplines, from the General Education Requirements for Transfer Degrees (MTA) list.

Complete at least 2 courses in the following course sets:
- CAT5 - Gen Ed Transfer - 2025

Additional Comments:
See General Education Requirements for Transfer Degrees for details.

Degree Specific Requirements

Environmental Studies AS - Degree Specific Requirements
Type
Completion Requirement

Computer Technology

Complete at least 1 courses in the following course sets:
- Computer Technology - 2020

Additional Comments:
See Degree Specific Requirements for details.

EVBATTERY.CA - EV Battery Manufacturing Technology

Program Information

Program Title
EV Battery Manufacturing Technology

Program Code
EVBATTERY.CA

Degree Type
Certificate of Achievement

Minimum Credits for Program Completion
21

Program Eligible for Financial Aid?
Yes

Subject
Electrical Engineering Technol

Semesters to Complete Program
2

Program Description
This certificate can be used as documentation to show a student has reached a certain level of proficiency in the fundamentals required in an electric vehicle battery manufacturing process. This certificate can be earned while pursuing an Associate in Applied Science degree in Electrical Engineering Technology or other Associate Degree programs. To earn this certificate students will receive training in some of the fundamental skills sought by electric vehicle battery manufacturers. These include basic electricity, the proper use of test equipment, digital electronics, circuit calculations, basic troubleshooting, reading schematic diagrams, data collection. Safety issues and concerns regarding the servicing of electric vehicle batteries. Also includes the study of electric vehicle battery types. The certificate also covers fundamental atomic structure; stoichiometry; molarity; the periodic table; nomenclature; reactions and equations, and properties of gases.

Faculty Contact
Massimo Pizzino

Faculty Contact Email
mfpizzino@hfcc.edu

Faculty Contact Phone
313-845-9814

Faculty Contact Office Location
E-115D

Academic Advisor
Rachel Vanzutphen

Academic Advisor Contact Email
rvanzutphen@hfcc.edu

Academic Advisor Contact Phone
313-845-9873

Academic Advisor Office Location
E-211L

School
Business, Entrepreneurship, PD

Academic Department
Advanced Manufacturing

Admissions Requirements

Admissions Requirements
Admission Requirements and Eligibility

Eligible to take a gateway MATH course at HFC or a satisfactory score on the Math placement exam. ENG131 Introduction College Writing eligible.

Program Learning Outcomes

- Interpret and develop technical drawing, schematics and diagrams.
- Create documents based on technical information using descriptive writing, diagrams, mathematical expression, computation, and graphs.
- Apply critical thinking skills to solving problems.
- Demonstrate the ability to communicate and perform in a team environment.
- Demonstrate proficiency in the use of chemical equipment.
- Analyze and interpret measurement data.
- Name chemicals from formulas for simple ionic and binary compounds and common acids. Common "ate" ion formulas should be committed to memory.
- Prepare spreadsheets that incorporate basic formulas and a variety of formatting options.

What Classes do I take?

2-Year Plan
EV Battery Manufacturing Technology - CA: Recommended Sequence - Current
Total Credits
21
Description
Enrollment Status: Full Time

If you have questions about the order in which you should take these courses, or the availability of these courses, please contact your advisor or the faculty contact listed above.

Program Contact Information

Office Contact: School of Business, Entrepreneurship, and Professional Development: 313-845-9645, bepdinfo@hfcc.edu, Technology Bldg, Room: E-211

Faculty Contact: Massimo Pizzino: 313-845-9814, mfpizzino@hfcc.edu, Technology Bldg, Room: E-115D

Academic Advisor: Rachel Vanzutphen: 313-845-9873, rvanzutphen@hfcc.edu, Technology Bldg, Room: E-211L

For students in an older version of this program, please visit Henry Ford College Catalog Archive to view required courses.

Year	Semester	Semester Credits
Year 1	Fall	11

Courses
- MATH100 - Basic Technical Mathematics
  OR
- MATH103 - Technical Mathematics
  OR
- MATH110 - Intermediate Algebra

Semester Credits	4
Contact Hours	62

Courses
- CIS100 - Introduction to Information Technology

Semester Credits
3
Contact Hours
47

Courses
- ELEC103 - Basic Electricity

Semester Credits
4
Contact Hours
92

Year	Semester	Semester Credits
Year 1	Winter	10

Courses
- CHEM111 - Chem Skills Pre-Professional Programs

Semester Credits
4
Contact Hours
77

Courses
- AUTO260 - Hybrid and Electric Vehicle Systems

Semester Credits
3
Contact Hours
62

Courses
- ELEC115 - Digital Circuits 1

Semester Credits
3
Contact Hours
62

Program Requirements

Minimum Credits for Program Completion
21

Minimum GPA required for Graduation
2.000

HFC Credit Hour Residency Requirement
20

Simple Requisites

Core Course Requirements

EV Battery Manufacturing Technology CA - Core Course Requirements
Type
Completion Requirement

Complete at least 1 of the following courses:
- MATH100-Basic Tech Mathematics 4 credits
  OR MATH103-Technical Mathematics 4 credits
  OR MATH110-Intermediate Algebra 4 credits

Complete ALL of the following Courses:
- ELEC103-Basic Electricity 4 credits
- ELEC115-Digital Circuits 1 3 credits
- CIS100-Intro Info Tech 3 credits
- AUTO260-Hybrid & Electric Vehicle Syst 3 credits

EXERCISESCIENCE.AS - Exercise Science

Program Information

Program Title
Exercise Science

Program Code
EXERCISESCIENCE.AS

Degree Type
Associate in Science

Minimum Credits for Program Completion
60

Program Eligible for Financial Aid?
Yes

Subject
Exercise Science

Semesters to Complete Program
5

Program Description
This program will prepare students to transfer to a four-year bachelor program in exercise science, kinesiology, athletic training, pre-physical therapy, nutrition, health, physical education, or other closely related program, or for direct entry into the health and fitness industry. The program follows the Michigan Pathways to ensure maximum transfer of credits.

Faculty Contact
Fred Williams

Faculty Contact Email
fdwilliams3@hfcc.edu

Faculty Contact Phone
313-845-9856

Faculty Contact Office Location
G-133J

Academic Advisor
Hannah Doederlein

Academic Advisor Contact Email
hrdoederlein@hfcc.edu

Academic Advisor Contact Phone
313-317-6868

Academic Advisor Office Location
G-203A

School
Health & Human Services

Academic Department
Health Careers, Education, and Human Services

Admissions Requirements

Admissions Requirements
Admission Requirements and Eligibility

There are no specific admission requirements for acceptance into the exercise science program. When applying to the college, students should choose exercise science as the course of study.

Program Learning Outcomes

Demonstrate a comprehensive understanding of the scientific principles related to Anatomy, Physiology, and Biomechanics applied to Exercise Science.

Create evidence-based exercise plans for healthy individuals following the guidelines of the American College of Sports Medicine, American Council on Exercise, the National Strength and Conditioning Association and other nationally recognized certifying bodies.

Perform accurate assessments of physical fitness based on standardized protocols from the American College of Sports Medicine, American Council on Exercise, the National Strength and Conditioning Association and other nationally recognized certifying bodies.

Demonstrate preparation for entry-level positions in the health and fitness industry or successful transfer to a four-year university program.

What Classes do I take?

2-Year Plan
Exercise Science - AS: Recommended Sequence - Current
Total Credits
60 - 62
Description
Enrollment Status: Full Time

If you have questions about the order in which you should take these courses, or the availability of these courses, please contact your advisor or the faculty contact listed below.

Program Contact Information

Office Contact: School of Health and Human Services: 313-845-9877, hhsinfo@hfcc.edu, Health Careers Education Ctr, Room: G-132

Faculty Contact: Fred Williams: 313-845-9877, fdwilliams3@hfcc.edu, Health Careers Bldg, Room: G-133J

Academic Advisor: Hannah Doederlein: 313-317-6868, hrdoederlein@hfcc.edu, Health Careers Bldg, Room: G-203A

For students in an older version of this program, please visit Henry Ford College Catalog Archive to view required courses.

Year	Semester	Semester Credits
Year 1	Fall	13

Courses
- ENG131 - Introduction to College Writing
  OR
- ENG131H - Honors Introduction to College Writing
  OR
- ENG132 - College Writing and Research
  OR
- ENG132H - Honors College Writing and Research

Semester Credits 3
Contact Hours 47

Courses
- BIO131 - Introduction to Biology

Semester Credits 4
Contact Hours 92

Courses
- HPE162 - Introduction to Exercise Science

Semester Credits 3
Contact Hours 47

Courses
- CIS100 - Introduction to Information Technology
  OR
- CIS221 - Instructional Tech Educators (Pre K-12)
  OR
- HCS131 - Computers in Health Care

Semester Credits
3
Contact Hours
47

Year	Semester	Semester Credits
Year 1	Winter	14 - 16

Courses
- ENG132 - College Writing and Research
  OR
- ENG132H - Honors College Writing and Research
  OR
- ENG135 - Business & Technical Writing & Research
  OR
- SPC131 - Intro to Public Speaking

Semester Credits
3
Contact Hours
47

Courses
- BIO233 - Anatomy and Physiology I

Semester Credits
4
Contact Hours
77

Courses
- PSY131 - Introductory Psychology

Semester Credits
3
Contact Hours
47

Courses
- CAT3 - Coll Algebra - Gen Ed Transfer - 2020
  OR
- CAT3 Stats - Gen Ed Transfer - 2025

Semester Credits
4 - 6
Contact Hours
62 - 92

Year	Semester	Semester Credits
Year 2	Fall	14

Courses
- BIO234 - Anatomy and Physiology II

Semester Credits
4
Contact Hours
77

Courses
- CHEM131 - Principles of Chemistry

Semester Credits
4
Contact Hours
77

Courses
- CAT5 - Gen Ed Transfer - 2025

Semester Credits
3
Contact Hours
47

Courses
- SOC131 - Introduction to Sociology

Semester Credits
3
Contact Hours
47

Year	Semester	Semester Credits
Year 2	Winter	15

Courses
- HPE270 - Exercise Physiology
  OR
- BIO270 - Exercise Physiology

Semester Credits
4
Contact Hours
77

Courses
- HPE253 - Nutrition for the Professional

Semester Credits
3
Contact Hours
47

Courses
- CAT5 - Gen Ed Transfer - 2025

Semester Credits 3
Contact Hours 47

Courses
- Elective Hours (Generic)

Semester Credits 5
Contact Hours 77

Year	Semester	Semester Credits
-	-	4

Courses
- Electives (Generic)

Semester Credits 4
Contact Hours 62

Program Requirements

Minimum Credits for Program Completion
60
Minimum GPA required for Graduation
2.000
HFC Credit Hour Residency Requirement
20

Simple Requisites

Core Course Requirements

Exercise Science AS - Core Course Requirements
Type
Completion Requirement

Complete ALL of the following Courses:
- BIO233-Anatomy and Physiology I 4 credits
- BIO234-Anatomy and Physiology II 4 credits

Exercise Physiology

Complete at least 1 of the following courses:
- HPE270-Exercise Physiology 4 credits
  OR BIO270-Exercise Physiology 4 credits

Complete ALL of the following Courses:
- HPE162-Intro to Exercise Science 3 credits
- HPE253-Nutrition for the Professional 3 credits
- PHYS131-General Physics I 4 credits

Support Course Requirements

Exercise Science AS - Support Course Requirements
Type
Completion Requirement

Category 6: Natural Sciences

Complete ALL of the following Courses:
- BIO131-Introduction to Biology 4 credits
- CHEM131-Principles of Chemistry 4 credits

Electives

Note: Recommended Electives: HPE170 Principles Personal Training: Principles of Personal Training, HPE258 Principle of Strength Training: Principles of Strength Training, AH105 Basic Life Support Healthcare: Basic Life Support for Healthcare Providers, CHEM132 Prin Organ & Bio Chem: Principles of Organic and Biological Chemistry, HPEA122 Yoga-Based Fitness: Yoga Based Fitness.

Earn at least 4 credits

General Education Requirements

Exercise Science AS - General Education Course Requirements
Type
Completion Requirement

Category 1: English Composition

Complete at least 1 of the following courses:
- ENG131-Introduction College Writing 3 credits
  OR ENG131H-Honors Intro College Writing 3 credits
  OR ENG132-College Writing and Research 3 credits
  OR ENG132H-Honors Coll Writing & Research 3 credits

Category 2: English Composition or Communications

Complete at least 1 of the following courses:
- SPC131-Introduction Public Speaking 3 credits
  OR ENG132-College Writing and Research 3 credits
  OR ENG132H-Honors Coll Writing & Research 3 credits

Category 3: Mathematics

Any course in the General Education Requirements for Transfer Degrees (MTA) Algebra track or the MTA Statistics track.

Complete at least 1 courses in the following course sets:
- CAT3 - Coll Algebra - Gen Ed Transfer - 2020
- CAT3 Stats - Gen Ed Transfer - 2025

Category 4: Social Sciences

Complete PSY131 Introductory Psychology and another Social Science course from a different discipline.

Complete at least 1 courses in the following course sets:
- CAT4 - Gen Ed Transfer - 2020

Category 5: Humanities and Fine Arts

Two (2) courses in Humanities and Fine Arts, from two different disciplines (subjects), from the General Education Requirements for Transfer Degrees (MTA) list, excluding studio and performance courses

Complete at least 2 courses in the following course sets:
- CAT5 - Gen Ed Transfer - 2025

Additional Comments:
See General Education Requirements for Transfer Degrees for details.

Degree Specific Requirements

Exercise Science AS - Degree Specific Course Requirements
Type
Completion Requirement

Computer Technology

Complete at least 1 courses in the following course sets:

- Computer Technology - 2020

Additional Comments:
See Degree Specific Requirements for details.

GENRL.AA - Liberal Arts

Program Information

Program Title
Liberal Arts AA Degree

Program Code
GENRL.AA

Degree Type
Associate in Arts

Minimum Credits for Program Completion
60

Program Eligible for Financial Aid?
Yes

Subject
Liberal Arts

Semesters to Complete Program
4

Program Description
The Associate of Arts degree is designed to assist students preparing to transfer to a four-year bachelor's degree. Completing HFC's Associate of Arts in Liberal Arts degree helps students transfer to a four-year degree program while providing a broad sampling of academic disciplines typical in the first two years of undergraduate study. By studying these disciplines -- humanities, natural sciences, mathematics, and social sciences -- to meet the requirements of the Michigan Transfer Agreement, students gain a solid foundation for continued study at the bachelor's degree level. Students may choose one of several pathways to focus on a particular discipline, or they may select classes that fulfill specific requirements at an intended transfer institution. Please consult with an advisor or counselor to learn more about transfer opportunities.

Faculty Contact
Ruth Haller

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Faculty Contact Phone
313-845-9827

Faculty Contact Office Location
N-229

Academic Advisor
Sarah Krizan

Academic Advisor Contact Email
smkrizan@hfcc.edu

Academic Advisor Contact Phone
313-845-9889

Academic Advisor Office Location
K-248

School
Liberal Arts

Academic Department
Fine & Performing Arts

Program Learning Outcomes

Society & Culture: Demonstrate an understanding within and across Liberal Arts examine disciplines of how various historical, political, and socioeconomic factors influence and are influenced by a diverse society and shifting of norms and values, and how those factors impact culture and community development; how the fine and performing arts (literature, drama, dance, visual arts, music, etc.) both communicate unique cultural perspectives and reflect shared human experiences.

Communication: Develop an effective process to clearly communicate information via writing and/or speaking to varied audiences within and across Liberal Arts disciplines. Compose and revise essays, speeches, and other projects in a variety of genres incorporating reflection, analysis, synthesis, and ethical source use.

Reading: Identify and employ effective reading strategies for a variety of reading situations within and across Liberal Arts disciplines. Work independently and collaboratively with complex written and visual materials, drawing connections between texts and relevant themes. Demonstrate comprehension through oral or written summary, response, analysis, and/or synthesis.

Critical Thinking: Analyze and evaluate available information(and identify the need for further research, when necessary) to arrive at reasonable judgments and conclusions within and across Liberal Arts disciplines; reduce bias in ones thinking about a topic or issue by considering a wide variety of differing perspectives and viewpoints.

Information Literacy: Locate, evaluate, and select information appropriate for diverse writing and research situations within and across Liberal Arts disciplines; organize, synthesize, and ethically document (formally and informally) information appropriate for diverse writing and research situations.

What Classes do I take?

2-Year Plan
Liberal Arts - AA: Recommended Sequence - Current
Total Credits
59 - 61
Description
Enrollment Status: Full Time

If you have questions about the order in which you should take these courses, or the availability of these courses, please contact your advisor or the faculty contact listed below.

Program Contact Information

Office Contact: School of Liberal Arts: 313-845-9624, lainfo@hfcc.edu, Liberal Arts Building, Room: K-201 and F-138

Faculty Contact: Anthony Perry: 313-845-6383, adperry1@hfcc.edu, Campus Safety, Room: N-237

Academic Advisor: Sarah Krizan: 313-845-9889, smkrizan@hfcc.edu, Liberal Arts Bldg, Room: K-248

For students in an older version of this program, please visit Henry Ford College Catalog Archive to view required courses.

The recommended course sequence below is for students following the General Pathway. If you have chosen a specific pathway, please work with an advisor/navigator, counselor or faculty chair to determine your course sequence.

Year	Semester	Semester Credits
Year 1	Fall	14 - 16

Courses

- CAT1 - Gen Ed Transfer - 2020

Semester Credits	3
Contact Hours	47

Courses
- MATH115 - College Algebra
  OR
- MATH131 - Mathematics for the Modern World
  OR
- MATH141 - Introduction to Statistics
  OR
- MATH175 - Precalculus
  OR
- MATH180 - Calculus I
  OR
- MATH183 - Calculus II
  OR
- MATH275 - Discrete Mathematics
  OR
- MATH280 - Calculus III
  OR
- MATH283 - Linear Algebra
  OR
- MATH288 - Differential Equations

Semester Credits
3 - 5
Contact Hours
62 - 77

Courses
- CAT4 - Gen Ed Transfer - 2020

Semester Credits
3
Contact Hours
47

Courses
- CAT5 - Gen Ed Transfer - 2025

Semester Credits
3
Contact Hours
47

Courses
- Electives: Complete additional 100-level, or higher, credits to complete this degree. (Generic)

Semester Credits
2
Contact Hours
32

Year	Semester	Semester Credits
Year 1	Winter	15

Courses
- CAT2 - Gen Ed Transfer - 2020

Semester Credits
3
Contact Hours
47

Courses
- CAT4 - Gen Ed Transfer - 2020

Semester Credits
3
Contact Hours
47

Courses
- CAT5 - Gen Ed Transfer - 2025

Semester Credits
3
Contact Hours
47

Courses
- CAT6 - Transfer - Lec and Lab - 2025
  OR
- CAT6 - Transfer - Lec Only - 2020
  OR
- CAT6 - Gen Ed Transfer - Lab Only - 2020

Semester Credits
3
Contact Hours
47

Courses
- Computer Technology - 2020

Semester Credits
3
Contact Hours
47

Year	Semester	Semester Credits
Year 2	Fall	15

Courses
- CAT6 - Transfer - Lec and Lab - 2025
  OR
- CAT6 - Transfer - Lec Only - 2020
  OR
- CAT6 - Gen Ed Transfer - Lab Only - 2020

Semester Credits
4
Contact Hours
62

Courses
- Gen Ed - 1 hr - 2025

Semester Credits 1
Contact Hours 16

Courses
- Electives: Complete additional 100-level, or higher, credits to complete this degree. (Generic)

Semester Credits 10
Contact Hours 152

Year	Semester	Semester Credits
Year 2	Winter	15

Courses
- Electives: Complete additional 100-level, or higher, credits to complete this degree. (Generic)

Semester Credits 15
Contact Hours 240

Program Requirements

Minimum Credits for Program Completion
60
Minimum GPA required for Graduation
2.000
HFC Credit Hour Residency Requirement
20

Simple Requisites

Core Course Requirements

Liberal Arts AA - General Pathway - Core Course Requirements
Type
Completion Requirement

General Pathway: Associate in Arts (AA) degrees require a minimum of 60 credits for graduation. Complete additional 100-level, or higher, courses to complete the requirements for this degree.

Earn at least 27 credits

Liberal Arts AA - American Studies Pathway - Core Course Requirements
Type
Completion Requirement

American Studies Pathway

Complete ALL of the following Courses:
- MUS133-Exploring Popular Music 3 credits
- HUM204-Intro to American Cultural Stu 3 credits
- SOC251-Ethnic & Racial Diversity 3 credits

English Electives

Complete at least 1 of the following courses:
- ENG235-Amer Literature Before 1900 3 credits
  OR ENG237-American Literature Since 1900 3 credits
  OR ENG248-African American Literature 3 credits

Electives: Complete additional 100-level, or higher, credits to complete this degree.

Earn at least 27 credits

Liberal Arts AA - Art Pathway - Core Course Requirements
Type
Completion Requirement

Art Pathway

Complete ALL of the following Courses:
- ART101-Two Dimensional Design 3 credits
- ART102-Drawing I 3 credits
- ART105-Three Dimensional Design 3 credits
- ART112-Drawing II 3 credits
- ART121-Art History Survey I 3 credits
- ART122-Art History Survey II 3 credits
- ART141-Ceramics I 3 credits

Drawing or Painting

Complete at least 1 of the following courses:
- ART113-Life Drawing I 3 credits
  OR ART116-Painting I 3 credits

Electives: Complete additional 100-level, or higher, credits to complete this degree.

Earn at least 27 credits

Liberal Arts AA - Art History Middle Eastern Traditions Pathway - Core Course Requirements
Type
Completion Requirement

Middle Eastern Traditions Pathway

Complete ALL of the following Courses:
- ANTH152-Mid East People and Cultures 3 credits
- ART121-Art History Survey I 3 credits
- ART221-Medieval Art 3 credits
- ART224-Art of Islam 3 credits
- ART227-History of Arab Art & Architec 3 credits
- ART228-Arabic Calligraphy 3 credits

Electives: Complete additional 100-level, or higher, credits to complete this degree.

Earn at least 27 credits

Liberal Arts AA - Art History-Non-Western Traditions Pathway - Core Course Requirements
Type
Completion Requirement

Art History-Non-Western Traditions Pathway

Complete ALL of the following Courses:
- ART121-Art History Survey I 3 credits
- ART122-Art History Survey II 3 credits
- ART225-Asian Art: India & SE Asia 3 credits
- ART226-African and Afro American Art 3 credits

Arab or Islam Art

Complete at least 1 of the following courses:
- ART224-Art of Islam 3 credits
  OR ART227-History of Arab Art & Architec 3 credits

Electives: Complete additional 100-level, or higher, credits to complete this degree.

Earn at least 27 credits

Liberal Arts AA - Art History-Western Traditions Pathway - Core Course Requirements
Type
Completion Requirement

Art History-Western Traditions Pathway

Complete ALL of the following Courses:
- ART121-Art History Survey I 3 credits
- ART122-Art History Survey II 3 credits
- ART221-Medieval Art 3 credits
- ART123-History of Modern Art 3 credits
- ART226-African and Afro American Art 3 credits
- ART229-Survey of Contemporary Art 3 credits

Electives: Complete additional 100-level, or higher, credits to complete this degree.

Earn at least 27 credits

Liberal Arts AA - Ceramics Pathway - Core Course Requirements
Type
Completion Requirement

Ceramics Pathway

Complete ALL of the following Courses:
- ART141-Ceramics I 3 credits
- ART105-Three Dimensional Design 3 credits
- ART142-Ceramics II 3 credits
- ART242-Ceramics III 3 credits
- ART2953-Advanced Study in Ceramics 3 credits

Art History

Complete at least 1 of the following courses:
- ART121-Art History Survey I 3 credits
  OR ART122-Art History Survey II 3 credits
  OR ART123-History of Modern Art 3 credits

Electives: Complete additional 100-level, or higher, credits to complete this degree.

Earn at least 27 credits

Liberal Arts AA - Dance Pathway - Core Course Requirements
Type
Completion Requirement

Dance Pathway

Complete ALL of the following Courses:
- DNCA1421-Intermediate Ballet I 2 credits
- DNCA1422-Intermediate Ballet II 2 credits
- DNCA1521-Intermediate Modern Dance I 2 credits
- DNCA1522-Intermediate Modern Dance II 2 credits
- DNCA1523-Intermediate Modern Dance III 2 credits
- DNCA221-College Dance Co I 3 credits
- DNCA222-College Dance Co II 3 credits
- DNCA223-College Dance Co III 3 credits
- DNCA230-Beginning Choreography 3 credits

Electives: Complete additional 100-level, or higher, credits to complete this degree

Earn at least 27 credits

Liberal Arts AA - English Pathway - Core Course Requirements
Type
Completion Requirement

English Pathway

Complete at least 1 of the following courses:
- ENG132-College Writing and Research 3 credits
  OR ENG132H-Honors Coll Writing & Research 3 credits
  OR ENG135-Bus & Tech Writing & Research 3 credits

English Electives

Complete at least 2 of the following courses:
- ENG139-Creative Writing 3 credits
- ENG231-Intro to Literature 3 credits
- ENG235-Amer Literature Before 1900 3 credits
- ENG237-American Literature Since 1900 3 credits
- ENG241-Shakespeare 3 credits
- ENG243-Women's Literature 3 credits
- ENG246-Intro to Children's Literature 3 credits
- ENG248-African American Literature 3 credits

Electives: Complete additional 100-level, or higher, credits to complete this degree

Earn at least 27 credits

Liberal Arts AA - Geography Pathway - Core Course Requirements
Type
Completion Requirement

Geography Pathway

Complete ALL of the following Courses:
- GEOG131-Environmental Geography 4 credits
- GEOG132-World Regional Geography 3 credits
- GEOG138-Geography of Michigan 3 credits
- GEOG221-Geography of the Middle East 3 credits

Electives: Complete additional 100-level, or higher, credits to complete this degree

Earn at least 27 credits

Liberal Arts AA - History Pathway - Core Course Requirements
Type
Completion Requirement

History Pathway

Complete ALL of the following Courses:
- HIST111-Ancient World History 3 credits
- HIST112-Medieval-Early Modern World 3 credits
- HIST151-Early American History 3 credits
- HIST152-Modern American History 3 credits

Electives: Complete additional 100-level, or higher, credits to complete this degree.

Earn at least 27 credits

Liberal Arts AA - Journalism Pathway - Core Course Requirements
Type
Completion Requirement

Journalism Pathway

Complete ALL of the following Courses:
- JOUR131-News Writing 3 credits
- MCA131-Intro to Media Communication 3 credits
- MCA132-Film History and Criticism 3 credits
- MCA241-Media Writing 3 credits
- MCA261-Broadcast Journalism 3 credits

Audio

Complete ALL of the following Courses:
- MCA151-Digital Audio Editing 1 credits
  AND MCA257-Video Production 3 credits

Video

Complete ALL of the following Courses:
- MCA157-Digital Video Editing 1 credits
  AND MCA257-Video Production 3 credits

Journalism Work Experience

Complete at least 1 of the following courses:
- BCO190-Co-op in Business 1 credits
  OR COMM190-Co-op in Communications 1 credits
  OR JOUR292-Journalism Online News Writing 1 credits
  OR SSCO190-Co-op in Social Science 1 credits
  OR MCA189-Introduction to WHFR Radio 1 credits

Journalism Support

Complete at least 1 of the following courses:
- ART107-Photoshop 3 credits
  OR ART114-Graphic Design Studio 1 3 credits
  OR ART123-History of Modern Art 3 credits
  OR ART135-Art Appreciation 3 credits
  OR ART150-Digital Photography I 3 credits
  OR BBA252-Principles of Marketing 3 credits
  OR ENG139-Creative Writing 3 credits
  OR ENG231-Intro to Literature 3 credits
  OR ENG232-Intro to the Short Story 3 credits
  OR ENG233-Intro to Novel 3 credits
  OR ENG234-Topics in Literature 3 credits
  OR ENG235-Amer Literature Before 1900 3 credits
  OR ENG236-American Autobiography 3 credits
  OR ENG237-American Literature Since 1900 3 credits
  OR ENG241-Shakespeare 3 credits
  OR ENG243-Women's Literature 3 credits
  OR ENG245-The Bible as Literature 3 credits
  OR ENG246-Intro to Children's Literature 3 credits
  OR ENG248-African American Literature 3 credits
  OR HON151-HonorColloquiumCultureDetroit 3 credits
  OR HON161-Honors Colloquium 3 credits
  OR HON251-Great Works 3 credits
  OR MCA243-Media Performance 3 credits
  OR MCA258-Advanced Media Production 3 credits
  OR MCA294-Media Comm Arts Internship 3 credits
  OR MUS133-Exploring Popular Music 3 credits
  OR THEA131-Theatre Appreciation 3 credits

Liberal Arts AA - Philosophy Pathway - Core Course Requirements
Type
Completion Requirement

Philosophy Pathway

Complete ALL of the following Courses:
- PHIL130-Introduction to Philosophy 3 credits
- PHIL131-Introduction to Logic 3 credits
- PHIL139-Ethics 3 credits
- PHIL133-Hist of Phil to 18th Century 3 credits
- PHIL135-History of Modern Philosophy 3 credits

Electives: Complete additional 100-level, or higher, credits to complete this degree

Earn at least 27 credits

Liberal Arts AA - Political Science Pathway - Core Course Requirements
Type
Completion Requirement

Political Science Pathway

Complete ALL of the following Courses:
- POLS131-Intro Amer Gov't & Pol Sci 3 credits
- POLS152-International Relations 3 credits
- POLS155-State&local Govern 3 credits
- POLS200-Intro to Peace and Conflict 3 credits

Electives: Complete additional 100-level, or higher, credits to complete this degree.

Earn at least 27 credits

Liberal Arts AA - Psychology Pathway - Core Course Requirements
Type
Completion Requirement

Psychology Pathway

Complete ALL of the following Courses:
- PSY131-Introductory Psychology 3 credits
- PSY251-Abnormal Psychology 3 credits

- PSY253-Lifespan Development 3 credits
- PSY254-Social Psychology 3 credits
- PHIL131-Introduction to Logic 3 credits

Electives: Complete additional 100-level, or higher, credits to complete this degree.

Earn at least 27 credits

Liberal Arts AA - Sociology Pathway - Core Course Requirements
Type
Completion Requirement

Sociology Pathway

Complete ALL of the following Courses:
- SOC131-Introduction to Sociology 3 credits

Sociology

Earn at least 12 credits from the following:
- SOC132-Marriage & Family 3 credits
- SOC151-Contemporary Social Problems 3 credits
- SOC152-Women, Men, & Society 3 credits
- SOC251-Ethnic & Racial Diversity 3 credits
- SOC253-Sociology of Deviance 3 credits

Electives: Complete additional 100-level, or higher, credits to complete this degree.

Earn at least 27 credits

Liberal Arts AA - Spanish for Business Pathway - Core Course Requirements
Type
Completion Requirement

Spanish for Business Pathway

Complete ALL of the following Courses:
- SPN130-Intro to Hispanic Cultures 3 credits
- SPN131-Elementary Spanish I 4 credits
- SPN132-Elementary Spanish II 4 credits
- SPN231-Intermediate Spanish I 4 credits
- SPN232-Intermediate Spanish II 4 credits
- BBA131-Intro to Business 4 credits

Electives

Earn at least 9 credits from the following:
- BEC151-Prin Macro Economics 3 credits
- BEC152-Prin Micro Economics 3 credits
- BLW253-Business Law & Legal Environme 4 credits
- POLS201-Public Policy: Topics & Analys 3 credits
- POLS202-Foreign Policy: Topics & Analy 3 credits
- SPN141-Elementary Spanish Conversatio 3 credits
- SPN290-Study Abroad Spanish Lang Cult 3 credits

Liberal Arts AA - Spanish for Education Pathway - Core Course Requirements
Type
Completion Requirement

Spanish for Education Pathway

It is recommended that students completing this pathway select CIS221 Instruction Tech for Educators *to fulfill the Computer Technology requirement.*

Complete ALL of the following Courses:
- SPN130-Intro to Hispanic Cultures 3 credits
- SPN131-Elementary Spanish I 4 credits
- SPN132-Elementary Spanish II 4 credits
- SPN231-Intermediate Spanish I 4 credits
- SPN232-Intermediate Spanish II 4 credits

Electives

Earn at least 9 credits from the following:
- EDU256-Educational Psychology 3 credits
- EDU260-History in Elementary Schools 3 credits
- EDU296-Exceptional Child 3 credits
- ENG246-Intro to Children's Literature 3 credits
- SPN141-Elementary Spanish Conversatio 3 credits
- SPN290-Study Abroad Spanish Lang Cult 3 credits

Psychology

Complete at least 1 of the following courses:
- PSY152-Child Psychology 3 credits

Liberal Arts AA - Theater Pathway - Core Course Requirements
Type
Completion Requirement

General Theater Courses

MTA Category 5 2nd Course Recommendation: ENG231 Intro to Literature: Introduction to Literature: Poetry and Drama or HUM101 Introduction to the Humanities: Introduction to the Humanities orMCA132 Film History and Criticism Film History and Criticism

MTA Category 6 Course Recommendation: PSCI135 Sound & Light in Fine-Arts: Sound & Light in Fine-Arts

Complete ALL of the following Courses:
- THEA131-Theatre Appreciation 3 credits
- THEA238-Theatre History 3 credits
- THEA1901-Theatre Experience I 1 credits
- THEA1902-Theatre Experience II 1 credits
- THEA281-Theatre Capstone 1 credits

Technical and Business Skills for Theatre

Complete at least 2 of the following courses:
- THEA135-Intro to Stage Makeup 3 credits
- THEA138-Stage Costuming 3 credits
- THEA150-Stagecraft 3 credits
- THEA255-Lighting 3 credits
- THEA2901-Directed Study 3 credits
- BAC131-Intro to Financial Accounting 4 credits
- BLDA110-Visual Communications 4 credits
- BLW253-Business Law & Legal Environme 4 credits

Dramatic Literature

Complete at least 1 of the following courses:
- ENG241-Shakespeare 3 credits

OR THEA235-Topics in Theatre 3 credits

Performance

Earn at least 6 credits from the following:
- THEA132-Acting I 3 credits
- THEA149-Children's Theatre Production 3 credits
- THEA232-Acting II 3 credits
- THEA256-Directing 3 credits
- MCA243-Media Performance 3 credits
- MUS113-Applied Music (1 Credit) 1 1 credits
- MUS115-Applied Music (1 Credit) 2 1 credits
- MUS123-Voice Techniques 1 2 credits
- MUS213-Applied Music (one Credit) 3 1 credits
- MUS215-Applied Music (one Credit) 4 1 credits

Electives: Complete additional 100-level, or higher, credits to complete this degree.

Earn at least 27 credits

Liberal Arts AA - World Religion Pathway - Core Course Requirements
Type
Completion Requirement

World Religion Pathway

Complete ALL of the following Courses:
- WR130-Intro to the Study of Religion 3 credits
- WR131-Relig Traditions in the World 3 credits

Complete at least 2 of the following courses:
- WR232-Judaism,christianity,and Islam 3 credits
- WR233-Eastern Religions 3 credits
- WR235-Christianity - First 1000 Year 3 credits
- WR236-African American Religious Ex 3 credits
- WR241-Islam 3 credits
- WR280-Topics in Religious Studies 3 credits

General Education Requirements

Liberal Arts AA - General Education Course Requirements
Type
Completion Requirement

Category 1: English Composition

Complete any one course from the General Education Requirements for Transfer Degrees (MTA) list.

Complete at least 1 courses in the following course sets:
- CAT1 - Gen Ed Transfer - 2020

Category 2: English Composition or Communications

Complete any one course from the General Education Requirements for Transfer Degrees (MTA) list.

Complete at least 1 courses in the following course sets:
- CAT2 - Gen Ed Transfer - 2020

Category 3: Mathematics

Complete any one course from the General Education Requirements for Transfer Degrees (MTA) list.

Complete at least 1 courses in the following course sets:
- CAT3 - Coll Algebra - Gen Ed Transfer - 2020
- CAT3 - Quant Lit - Gen Ed Transfer - 2025
- CAT3 Stats - Gen Ed Transfer - 2025

Category 4: Social Sciences

Complete any two courses from the General Education Requirements for Transfer Degrees (MTA) list, from different disciplines.

Complete at least 2 courses in the following course sets:
- CAT4 - Gen Ed Transfer - 2020

Category 5: Humanities and Fine Arts

Complete any two courses from the General Education Requirements for Transfer Degrees (MTA) list, from different disciplines.

Complete at least 2 courses in the following course sets:
- CAT5 - Gen Ed Transfer - 2025

Category 6: Natural Sciences

Complete any two courses, from the General Education Requirements for Transfer Degrees (MTA) list, including one with laboratory experience, from different disciplines.

Complete at least 2 courses in the following course sets:
- CAT6 - Gen Ed Transfer - Lab Only - 2020
- CAT6 - Transfer - Lec Only - 2020
- CAT6 - Gen Ed Transfer - Lab Only - 2020

Complete any additional General Education course to meet the 30 hour General Education requirement.

Earn at least 30 credits

Additional Comments:
See General Education Requirements for Transfer Degrees for details.

Degree Specific Requirements

Liberal Arts AA - Degree Specific Course Requirements
Type
Completion Requirement

Computer Technology

Complete at least 1 courses in the following course sets:
- Computer Technology - 2020

Additional Comments:
See Degree Specific Requirements for details.

GENRL.AB - General Business

Program Information

Program Title
General Business AB Degree

Program Code
GENRL.AB

Degree Type
Associate in Business

Minimum Credits for Program Completion
60

Program Eligible for Financial Aid?
Yes

Subject
Business Administration

Semesters to Complete Program
4

Program Description
Enables students to customize their academic programs to meet specific goals and is often used by students who are interested in transferring to a four-year institution. The associate s degree in General Business with no concentration is the most basic and flexible degree offered by the Business and Computer Technology Division. Students may combine this degree with certificate programs offered by the Business and Computer Technology Division or with a degree in another area to improve their employability. The division offers the following certificates:

* Bookkeeping
* Computer Software Applications
* Customer Service Professional
* Industrial Distribution – Business Concentration
* Office Administration
* Office Skills - Fundamentals
* Small Business Management and Entrepreneurship
* Supervision

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Academic Advisor
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Academic Advisor Contact Phone
313-845-6486

Academic Advisor Office Location
E-211H

School
Business, Entrepreneurship, PD

Academic Department
Business & Economics

Program Learning Outcomes

Explain how the activities involved in operating a business connect with one another.

Evaluate the opportunities and threats resulting from current business trends.

Evaluate strategies for obtaining, securing, and growing personal wealth.

Apply math concepts to solve business and finance related problems and conduct business research.

Employ computer software application programs such as word processing and spreadsheets, to perform ordinary business activities.

Model appropriate and effective verbal and nonverbal communication in a business setting.

What Classes do I take?

2-Year Plan
General Business - AB: Recommended Sequence - Current
Total Credits
60 - 64
Description
Enrollment Status: Full Time

If you have questions about the order in which you should take these courses, or the availability of these courses, please contact your advisor or the faculty contact listed below.

Program Contact Information

Office Contact: School of Business, Entrepreneurship, and Professional Development: 313-845-9645, bepdinfo@hfcc.edu, Technology Bldg, Room: E-211

Faculty Contact: Jared Boyd: 313-845-9697, jpboyd@hfcc.edu, Liberal Arts Building, Room: K-328

Academic Advisor: Ashlei Chears: 313-845-6486, achears@hfcc.edu, Technology Bldg, Room: E-211H

For students in an older version of this program, please visit Henry Ford College Catalog Archive to view required courses.

Year	Semester	Semester Credits
Year 1	Fall	16 - 19

Courses
- BBA131 - Introduction to Business

Semester Credits 4
Contact Hours 62

Courses
- CIS100 - Introduction to Information Technology

Semester Credits 3
Contact Hours 47

Courses
- Business: Complete at least one course from the business options listed. (Generic)

Semester Credits 3
Contact Hours 47

Courses
- BMA110 - Business Math
  OR
- MATH110 - Intermediate Algebra
  OR
- MATH115 - College Algebra
  OR
- MATH131 - Mathematics for the Modern World
  OR
- MATH141 - Introduction to Statistics
  OR
- MATH165 - Mathematics for Calculus
  OR
- MATH175 - Precalculus
  OR
- MATH180 - Calculus I
  OR
- MATH183 - Calculus II
  OR
- MATH275 - Discrete Mathematics
  OR
- MATH280 - Calculus III
  OR
- MATH283 - Linear Algebra
  OR
- MATH288 - Differential Equations

Semester Credits 3 - 6
Contact Hours 47 - 92

Courses
- Gen Ed - 3 hrs - 2025

Semester Credits 3
Contact Hours 47

Year	Semester	Semester Credits
Year 1	Winter	15

Courses
- ENG131 - Introduction to College Writing

Semester Credits 3
Contact Hours 47

Courses
- Business: Complete at least two courses from the business options listed. (Generic)

Semester Credits 6
Contact Hours 94

Courses
- Electives: Complete additional 100-level, or higher, credits to complete this degree. (Generic)

Semester Credits 6
Contact Hours 94

Year	Semester	Semester Credits
Year 2	Fall	16 - 17

Courses
- Business: Complete at least one course from the business options listed. (Generic)

Semester Credits 4
Contact Hours 62

Courses
- ENG132 - College Writing and Research
  OR
- ENG132H - Honors College Writing and Research
  OR
- ENG135 - Business & Technical Writing & Research

Semester Credits 3
Contact Hours 47

Courses
- BAC110 - Practical Accounting
  OR
- BAC131 - Introduction to Financial Accounting
  OR
- BFN141 - Personal Finance

Semester Credits 3 - 4
Contact Hours 47 - 62

Courses
- Electives: Complete additional 100-level, or higher, credits to complete this degree. (Generic)

Semester Credits 6
Contact Hours 94

Year	Semester	Semester Credits
Year 2	Winter	13

Courses
- Electives: Complete additional 100-level, or higher, credits to complete this degree. (Generic)

Semester Credits 13
Contact Hours 208

Program Requirements

Minimum Credits for Program Completion
60

Minimum GPA required for Graduation
2.000

HFC Credit Hour Residency Requirement
20

Simple Requisites

Core Course Requirements

General Business AB - Core Course Requirements
Type
Completion Requirement

Complete ALL of the following Courses:
- BBA131-Intro to Business 4 credits

Accounting or Finance

Complete at least 1 of the following courses:
- BAC110-Practical Accounting 4 credits
  OR BAC131-Intro to Financial Accounting 4 credits
  OR BFN141-Personal Finance 3 credits

Support Course Requirements

General Business AB - Support Course Requirements
Type
Completion Requirement

Complete ALL of the following Courses:
- CIS100-Intro Info Tech 3 credits
- ENG131-Introduction College Writing 3 credits

Category 2: English Composition or Communication

Complete at least 1 of the following courses:
- ENG132-College Writing and Research 3 credits
  OR ENG132H-Honors Coll Writing & Research 3 credits
  OR ENG135-Bus & Tech Writing & Research 3 credits

Category 3: Mathematics

Complete at least 1 of the following courses:
- BMA110-Business Math 3 credits
  OR MATH115-College Algebra 5 credits
  OR MATH131-Math for the Modern World 4 credits
  OR MATH141-Introduction to Statistics 4 credits
  OR
  OR MATH165-Mathematics for Calculus 6 credits
  OR MATH175-Precalculus 5 credits
  OR MATH180-Calculus 1 5 credits
  OR MATH183-Calculus II 5 credits
  OR MATH275-Discrete Mathematics 4 credits
  OR MATH280-Calculus III 5 credits
  OR MATH283-Linear Algebra 3 credits
  OR MATH288-Differential Equations 5 credits

Business Support Courses

Complete 13 credits from Accounting (BAC), Business Administration (BBA), Computer Applications (BCA), Business Co-op (BCO), Economics (BEC), Finance (BFN), Business Law (BLW), Business Supply Chain (BSC), Management (MGT), and/or Paralegal Studies (PLGL).

Earn at least 13 credits

Elective Courses

Students should complete as many business-related courses as necessary to have completed a grand total of 20 business-related credit hours.

Earn at least 25 credits

General Education Requirements

General Business AB - General Education Course Requirements
Type
Completion Requirement

Category 7: General Education

Complete at least 1 courses in the following course sets:
- Gen Ed - 3 hrs - 2025

Additional Comments:
See General Education Requirements for Transfer Degrees for details.

GENRL.AGS - General Studies

Program Information

Program Title
General Studies AGS Degree

Program Code
GENRL.AGS

Degree Type
Associate in General Studies

Minimum Credits for Program Completion
60

Program Eligible for Financial Aid?
Yes

Subject
Liberal Arts

Semesters to Complete Program
4

Program Description
Completion of course work in the General Studies Associate degree signifies that the student is broadly educated in the major divisions of higher learning: humanities, natural sciences, mathematics, social sciences, and fine arts. The student has acquired methods of study and habits of thought which are demonstrated by an ability to analyze problems, make appropriate value judgments, and express conclusions in cogent style. The student devotes a portion of study within at least one career education course to explore career, employment, or other educational advancement opportunities.

Students in the General Studies Associate Degree should select electives to reflect both the student's interests and the requirements of the intended transfer institution. Students are encouraged to consult the transfer guide sheets located in the University, Transfer, Advising, and Career Counseling Center.

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Faculty Contact Office Location
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Sarah Krizan

Academic Advisor Contact Email
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Academic Advisor Contact Phone
313-845-9889

Academic Advisor Office Location
K-248

School
Liberal Arts

Academic Department
Social Science

Program Learning Outcomes

Civil Society and Culture: Compare and contrast the United States with other nations or world regions, addressing social (economic, political and cultural) issues, patterns of diversity, or aspects of inequality.

Communication: Effectively communicate ideas appropriate to their discipline using Standard English, through written and verbal communication.

Computer Technology: Demonstrate skills for computer technology, including internet, network and advanced file operations. Skills will include organizing, managing, and presenting data using office productivity software. Students will also identify security and integrity threats and identify unethical actions within their social or professional environments.

Critical Thinking/Information Literacy: Demonstrate the ability to analyze and evaluate information and identify the need for research to draw conclusions, formulate inferences, solve problems and make decisions. Students will also demonstrate information literacy skills by locating, evaluating, selecting, organizing, synthesizing, and ethically documenting information from multiple sources using both informal and formal formats, as appropriate for diverse writing situations.

Quantitative Literacy: Apply quantitative skills to analyze situations and make decisions in a variety of contexts.

What Classes do I take?

2-Year Plan
General Studies - AGS: Recommended Sequence - Current
Total Credits
60
Description
Enrollment Status: Full Time

If you have questions about the order in which you should take these courses, or the availability of these courses, please contact your advisor or the faculty contact listed below.

Program Contact Information

Office Contact: School of Liberal Arts: 313-845-9624, lainfo@hfcc.edu, Liberal Arts Building, Room: K-201 and F-138

Faculty Contact: Brad Romans: 313-845-6385, bpromans@hfcc.edu, Liberal Arts Building, Room: K-208

Academic Advisor: Sarah Krizan: 313-845-9889, smkrizan@hfcc.edu, Liberal Arts Bldg, Room: K-248

For students in an older version of this program, please visit Henry Ford College Catalog Archive to view required courses.

Year	Semester	Semester Credits
Year 1	Fall	15

Courses
- CAT1 - Gen Ed Applied - 2020

Semester Credits 3
Contact Hours 47

Courses
- Computer Technology - 2020

Semester Credits 3
Contact Hours 47

Courses
- Electives: Complete additional 100-level, or higher, credits to complete this degree. (Generic)

Semester Credits 9
Contact Hours 144

Year	Semester	Semester Credits
Year 1	Winter	15

Courses
- CAT3 - Gen Ed Applied - 2025

Semester Credits
3
Contact Hours
47

Courses
- CAT6 - Gen Ed Applied - 2020

Semester Credits
3
Contact Hours
47

Courses
- Electives: Complete additional 100-level, or higher, credits to complete this degree. (Generic)

Semester Credits
9
Contact Hours
144

Year	Semester	Semester Credits
Year 2	Fall	15

Courses
- CAT4 - Gen Ed Applied - 2020

Semester Credits
3
Contact Hours
47

Courses
- Electives: Complete additional 100-level, or higher, credits to complete this degree. (Generic)

Semester Credits
9
Contact Hours
144

Courses
- CAT6 - Gen Ed Applied - 2020

Semester Credits
3
Contact Hours
47

Year	Semester	Semester Credits
Year 2	Winter	15

Courses
- Electives: Complete additional 100-level, or higher, credits to complete this degree. (Generic)

Semester Credits
15
Contact Hours
240

Program Requirements

Minimum Credits for Program Completion
60
Minimum GPA required for Graduation
2.000
HFC Credit Hour Residency Requirement
20

Simple Requisites

Support Course Requirements

General Studies AGS - Support Course Requirements
Type
Completion Requirement

Elective Hours

Complete additional 100-level, or higher, courses to complete the requirements for this degree.

Earn at least 42 credits

General Education Requirements

General Studies AGS - General Education Course Requirements
Type
Completion Requirement

Category 1: English Composition

Complete at least 1 courses in the following course sets:
- CAT1 - Gen Ed Applied - 2020

Category 3: Mathematics

Complete at least 1 courses in the following course sets:
- CAT3 - Gen Ed Applied - 2025

Category 4: Social Sciences

Complete at least 1 courses in the following course sets:
- CAT4 - Gen Ed Applied - 2020

Category 5: Humanities and Fine Arts

Complete at least 1 courses in the following course sets:
- CAT3 - Gen Ed Applied - 2025

Category 6: Natural Sciences

Complete at least 1 courses in the following course sets:
- CAT6 - Gen Ed Applied - 2020

Additional Comments:
Not all HFC General Education courses meet the Michigan Transfer Agreement (MTA) requirements. See General Education Requirements for Applied Degrees for details.

Degree Specific Requirements

General Studies AGS - Degree Specific Course Requirements
Type
Completion Requirement

Computer Technology

Complete at least 1 courses in the following course sets:
- Computer Technology - 2020

Additional Comments:
See Degree Specific Requirements for details.

GENRLJOURNALISM.AA - Liberal Arts - Journalism

Program Information

Program Title
Liberal Arts - Journalism

Program Code
GENRLJOURNALISM.AA

Degree Type
Associate in Arts

Minimum Credits for Program Completion
60

Program Eligible for Financial Aid?
Yes

Subject
Journalism

Semesters to Complete Program
4

Program Description
Completion of course work in the Liberal Arts Associate of Arts degree signifies that the student is broadly educated in the major divisions of higher learning: humanities, natural sciences, mathematics, social sciences, and fine arts. The student has acquired methods of study and habits of thought which are demonstrated by an ability to analyze problems, make appropriate value judgments, and express conclusions in cogent style. The student devotes a portion of study to in-depth concentration of [Journalism].

Students in the Liberal Arts Associate of Arts degree should select electives to reflect both the student's interests and the requirements of the intended transfer institution. Students are encouraged to consult the transfer guide sheets located in the University, Transfer, Advising, and Career Counseling Center.

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Academic Advisor Office Location
K-248

School
Liberal Arts

Academic Department
Media Communication Arts

Program Learning Outcomes

Civil Society and Culture: Compare and contrast the United States with other nations or world regions, addressing social (economic, political and cultural) issues, patterns of diversity, or aspects of inequality.

Communication: Effectively communicate ideas appropriate to their discipline using Standard English, through written and verbal communication.

Computer Technology: Demonstrate skills for computer technology, including internet, network and advanced file operations. Skills will include organizing, managing, and presenting data using office productivity software. Students will also identify security and integrity threats and identify unethical actions within their social or professional environments.

Critical Thinking/Information Literacy: Demonstrate the ability to analyze and evaluate information and identify the need for research to draw conclusions, formulate inferences, solve problems and make decisions. Students will also demonstrate information literacy skills by locating, evaluating, selecting, organizing, synthesizing, and ethically documenting information from multiple sources using both informal and formal formats, as appropriate for diverse writing situations.

Quantitative Literacy: Apply quantitative skills to analyze situations and make decisions in a variety of contexts.

Journalism: Apply the gathering, processing and writing of news and information on current matters using professional standards in both print and online news production.

What Classes do I take?

2-Year Plan
Liberal Arts: Journalism - AA: Recommended Sequence - Current
Total Credits
60 - 61
Description
Enrollment Status: Full Time

If you have questions about the order in which you should take these courses, or the availability of these courses, please contact your advisor or the faculty contact listed below.

Program Contact Information

Office Contact: School of Liberal Arts: 313-845-9624, lainfo@hfcc.edu, Liberal Arts Building, Room: K-201 and F-138

Faculty Contact: Peter Kim: 313-317-6682, pkim@hfcc.edu, Campus Safety, Room: N-204

Academic Advisor: Sarah Krizan: 313-845-9889, smkrizan@hfcc.edu, Liberal Arts Bldg, Room: K-248

For students in an older version of this program, please visit Henry Ford College Catalog Archive to view required courses.

Year	Semester	Semester Credits
Year 1	Fall	16 - 17

Courses
- JOUR131 - News Writing

Semester Credits
3
Contact Hours
47

Courses
- POLS131 - Intro to American Gov't & Politi Science

Semester Credits
3
Contact Hours
47

Courses
- MCA131 - Intoduction to Media Communication

Semester Credits 3
Contact Hours 47

Courses
- CAT1 - Gen Ed Transfer - 2020

Semester Credits 3
Contact Hours 47

Courses
- MATH115 - College Algebra
  OR
- MATH131 - Mathematics for the Modern World
  OR
- MATH141 - Introduction to Statistics
  OR
- MATH175 - Precalculus
  OR
- MATH180 - Calculus I
  OR
- MATH183 - Calculus II
  OR
- MATH275 - Discrete Mathematics
  OR
- MATH280 - Calculus III
  OR
- MATH283 - Linear Algebra
  OR
- MATH288 - Differential Equations

Semester Credits 4 - 5
Contact Hours 62 - 77

Year	Semester	Semester Credits
Year 1	Winter	16

Courses
- MCA132 - Film History and Criticism

Semester Credits 3
Contact Hours 47

Courses
- MCA151 - Digital Audio Editing
- **AND** MCA251 - Audio Production

Semester Credits 4
Contact Hours 63

Courses
- Computer Technology - 2020

Semester Credits 3
Contact Hours 47

Courses
- CAT2 - Gen Ed Transfer - 2020

Semester Credits 3
Contact Hours 47

Courses
- ART107 - Photoshop
  OR
- ART114 - Graphic Design Studio 1
  OR
- ART123 - History of Modern Art
  OR
- ART135 - Art Appreciation
  OR
- ART150 - Digital Photography I
  OR
- BBA252 - Principles of Marketing
  OR
- ENG139 - Creative Writing
  OR
- ENG231 - Intro to Literature: Poetry and Drama
  OR
- ENG232 - Introduction to the Short Story
  OR
- ENG233 - Introduction to the Novel
  OR
- ENG234 - Topics in Literature
  OR
- ENG235 - American Literature Before 1900
  OR
- ENG236 - American Autobiography
  OR
- ENG237 - American Literature Since 1900
  OR
- ENG241 - Shakespeare
  OR
- ENG243 - Women's Literature
  OR
- ENG245 - The Bible as Literature
  OR
- ENG246 - Introduction to Children's Literature
  OR
- ENG248 - African American Literature
  OR
- HON151 - Honor Colloquium-History Culture Detroit
  OR
- HON161 - Honors Colloquium
  OR
- HON251 - Great Works
  OR
- MCA243 - Media Performance
  OR
- MCA258 - Advanced Media Production
  OR
- MCA294 - Media Communication Arts Internship
  OR
- MUS133 - Exploring Popular Music
  OR
- THEA131 - Theatre Appreciation

Semester Credits
3
Contact Hours
47 - 92

Year	Semester	Semester Credits
Year 2	Fall	16

Courses
- MCA241 - Media Writing

Semester Credits
3
Contact Hours
47

Courses
- MCA157 - Digital Video Editing
- **AND** MCA257 - Video Production

Semester Credits
4
Contact Hours
78

Courses
- CAT4 - Gen Ed Transfer - 2020

Semester Credits
3
Contact Hours
47

Courses
- CAT6 - Transfer - Lec and Lab - 2025
  OR
- CAT6 - Transfer - Lec Only - 2020
  OR
- CAT6 - Gen Ed Transfer - Lab Only - 2020

Semester Credits
3
Contact Hours
47

Courses
- CAT5 - Gen Ed Transfer - 2025

Semester Credits
3
Contact Hours
47

Year	Semester	Semester Credits
Year 2	Winter	12

Courses
- MCA261 - Broadcast Journalism

Semester Credits
3
Contact Hours
47

Courses
- BCO190 - Co-op in Business
  OR
- COMM190 - Co-op in Communications
  OR
- JOUR292 - Journalism Experience-Online News Writin
  OR
- SSCO190 - Co-op in Social Science
  OR
- TCM189 - WHFR Staff Training

Semester Credits 1
Contact Hours 3 - 75

Courses
- CAT6 - Transfer - Lec and Lab - 2025
  OR
- CAT6 - Transfer - Lec Only - 2020
  OR
- CAT6 - Gen Ed Transfer - Lab Only - 2020

Semester Credits 4
Contact Hours 62

Courses
- Gen Ed - 1 hr - 2025

Semester Credits 1
Contact Hours 16

Courses
- CAT5 - Gen Ed Transfer - 2025

Semester Credits 3
Contact Hours 47

2-Year Plan
Liberal Arts: Journalism - AA: Recommended Sequence 2022-2023
Total Credits
60 - 61
Description
Enrollment Status: Full Time

If you have questions about the order in which you should take these courses, or the availability of these courses, please contact your advisor or the faculty contact listed below.

Program Contact Information

Office Contact: School of Liberal Arts: 313-845-9624, lainfo@hfcc.edu, Liberal Arts Building, Room: K-201 and F-138

Faculty Contact: Peter Kim: 313-317-6682, pkim@hfcc.edu, Campus Safety, Room: N-204

Academic Advisor: Sarah Krizan: 313-845-9889, smkrizan@hfcc.edu, Liberal Arts Bldg, Room: K-248

For students in an older version of this program, please visit Henry Ford College Catalog Archive to view required courses.

Year	Semester	Semester Credits
Year 1	Fall	16 - 17

Courses
- JOUR131 - News Writing

Semester Credits 3
Contact Hours 47

Courses
- POLS131 - Intro to American Gov't & Politi Science

Semester Credits 3
Contact Hours 47

Courses
- TCM131 - Introduction to Telecommunication

Semester Credits 3
Contact Hours 47

Courses
- CAT1 - Gen Ed Transfer - 2020

Semester Credits 3
Contact Hours 47

Courses
- MATH115 - College Algebra
  OR
- MATH131 - Mathematics for the Modern World
  OR
- MATH141 - Introduction to Statistics
  OR
- MATH175 - Precalculus
  OR
- MATH180 - Calculus I
  OR
- MATH183 - Calculus II
  OR
- MATH275 - Discrete Mathematics
  OR
- MATH280 - Calculus III
  OR
- MATH283 - Linear Algebra
  OR
- MATH288 - Differential Equations

Semester Credits 4 - 5
Contact Hours 62 - 77

Year	Semester	Semester Credits
Year 1	Winter	16

Courses
- TCM132 - Film History and Criticism

Semester Credits 3
Contact Hours 47

Courses
- TCM151 - Digital Audio Editing
- **AND** TCM251 - Audio Production

Semester Credits
4
Contact Hours
63

Courses
- Computer Technology - 2020

Semester Credits
3
Contact Hours
47

Courses
- CAT2 - Gen Ed Transfer - 2020

Semester Credits
3
Contact Hours
47

Courses
- ART107 - Photoshop
  OR
- ART114 - Graphic Design Studio 1
  OR
- ART123 - History of Modern Art
  OR
- ART135 - Art Appreciation
  OR
- ART150 - Digital Photography I
  OR
- BBA252 - Principles of Marketing
  OR
- ENG139 - Creative Writing
  OR
- ENG231 - Intro to Literature: Poetry and Drama
  OR
- ENG232 - Introduction to the Short Story
  OR
- ENG233 - Introduction to the Novel
  OR
- ENG234 - Topics in Literature
  OR
- ENG235 - American Literature Before 1900
  OR
- ENG236 - American Autobiography
  OR
- ENG237 - American Literature Since 1900
  OR
- ENG241 - Shakespeare
  OR
- ENG243 - Women's Literature
  OR
- ENG245 - The Bible as Literature
  OR
- ENG246 - Introduction to Children's Literature
  OR
- ENG248 - African American Literature
  OR
- HON151 - Honor Colloquium-History Culture Detroit
  OR
- HON161 - Honors Colloquium
  OR
- HON251 - Great Works
  OR
- MUS133 - Exploring Popular Music
  OR
- TCM243 - Media Performance
  OR
- TCM258 - Film/Video Production II
  OR
- TCM294 - Telecommunication Internship
  OR
- THEA131 - Theatre Appreciation

Semester Credits
3
Contact Hours
47 - 92

Year	Semester	Semester Credits
Year 2	Fall	16

Courses
- TCM241 - Media Writing

Semester Credits
3
Contact Hours
47

Courses
- TCM157 - Digital Video Editing
- **AND** TCM257 - Video Production I

Semester Credits
4
Contact Hours
78

Courses
- CAT4 - Gen Ed Transfer - 2020

Semester Credits
3
Contact Hours
47

Courses
- CAT6 - Transfer - Lec and Lab - 2025
  OR
- CAT6 - Transfer - Lec Only - 2020
  OR
- CAT6 - Gen Ed Transfer - Lab Only - 2020

Semester Credits 3
Contact Hours 47

Courses
- CAT5 - Gen Ed Transfer - 2025

Semester Credits 3
Contact Hours 47

Year	Semester	Semester Credits
Year 2	Winter	12

Courses
- TCM261 - Broadcast Journalism

Semester Credits 3
Contact Hours 47

Courses
- BCO190 - Co-op in Business
  OR
- COMM190 - Co-op in Communications
  OR
- JOUR292 - Journalism Experience-Online News Writin
  OR
- SSCO190 - Co-op in Social Science
  OR
- TCM189 - WHFR Staff Training

Semester Credits 1
Contact Hours 3 - 75

Courses
- CAT6 - Transfer - Lec and Lab - 2025
  OR
- CAT6 - Transfer - Lec Only - 2020
  OR
- CAT6 - Gen Ed Transfer - Lab Only - 2020

Semester Credits 4
Contact Hours 62

Courses
- Gen Ed - 1 hr - 2025

Semester Credits 1
Contact Hours 16

Courses
- CAT5 - Gen Ed Transfer - 2025

Semester Credits 3
Contact Hours 47

Program Requirements

Minimum Credits for Program Completion
60
Minimum GPA required for Graduation
2.000
HFC Credit Hour Residency Requirement
20

Simple Requisites

Core Course Requirements

Liberal Arts - Journalism AA - Core Course Requirements
Type
Completion Requirement

Complete ALL of the following Courses:
- JOUR131-News Writing 3 credits
- MCA131-Intro to Media Communication 3 credits
- MCA132-Film History and Criticism 3 credits
- MCA241-Media Writing 3 credits
- MCA261-Broadcast Journalism 3 credits

Audio

Complete ALL of the following Courses:
- MCA151-Digital Audio Editing 1 credits
  AND MCA251-Audio Production 3 credits

Video

Complete ALL of the following Courses:
- MCA157-Digital Video Editing 1 credits
  AND MCA257-Video Production 3 credits

Support Course Requirements

Liberal Arts - Journalism AA - Support Course Requirements
Type
Completion Requirement

Journalism Work Experience

Complete at least 1 of the following courses:
- BCO190-Co-op in Business 1 credits
  OR COMM190-Co-op in Communications 1 credits
  OR JOUR292-Journalism Online News Writing 1 credits
  OR SSCO190-Co-op in Social Science 1 credits
  OR MCA189-Introduction to WHFR Radio 1 credits

Journalism Support

Complete at least 1 of the following courses:
- ART107-Photoshop 3 credits
  OR ART114-Graphic Design Studio 1 3 credits

OR ART123-History of Modern Art 3 credits
OR ART135-Art Appreciation 3 credits
OR ART150-Digital Photography I 3 credits
OR BBA252-Principles of Marketing 3 credits
OR ENG139-Creative Writing 3 credits
OR ENG231-Intro to Literature 3 credits
OR ENG232-Intro to the Short Story 3 credits
OR ENG233-Intro to Novel 3 credits
OR ENG234-Topics in Literature 3 credits
OR ENG235-Amer Literature Before 1900 3 credits
OR ENG236-American Autobiography 3 credits
OR ENG237-American Literature Since 1900 3 credits
OR ENG241-Shakespeare 3 credits
OR ENG243-Women's Literature 3 credits
OR ENG245-The Bible as Literature 3 credits
OR ENG246-Intro to Children's Literature 3 credits
OR ENG248-African American Literature 3 credits
OR HON151-HonorColloquiumCultureDetroit 3 credits
OR HON161-Honors Colloquium 3 credits
OR HON251-Great Works 3 credits
OR MCA243-Media Performance 3 credits
OR MCA258-Advanced Media Production 3 credits
OR MCA294-Media Comm Arts Internship 3 credits
OR MUS133-Exploring Popular Music 3 credits
OR THEA131-Theatre Appreciation 3 credits

General Education Requirements

Liberal Arts - Journalism AA - General Education Course Requirements
Type
Completion Requirement

Category 1: English Composition

Complete any one, from the Michigan Transfer Agreement (MTA) list.

Complete ALL of the following Course Sets:
- CAT1 - Gen Ed Transfer - 2020

Category 2: English Composition or Communications

Complete any one course from the Michigan Transfer Agreement (MTA) list.

Complete at least 1 courses in the following course sets:
- CAT2 - Gen Ed Transfer - 2020

Category 3: Mathematics

Complete any one course from the Michigan Transfer Agreement (MTA) list.

Complete ALL of the following Course Sets:
- CAT3 - Coll Algebra - Gen Ed Transfer - 2020
- CAT3 - Quant Lit - Gen Ed Transfer - 2025
- CAT3 Stats - Gen Ed Transfer - 2025

Category 4: Social Sciences

Complete any two, from different disciplines, from the Michigan Transfer Agreement (MTA) list.

Complete at least 2 courses in the following course sets:
- CAT4 - Gen Ed Transfer - 2020

Category 5: Humanities and Fine Arts

Complete any two, from different disciplines, from the Michigan Transfer Agreement (MTA) list.

Complete at least 2 courses in the following course sets:
- CAT5 - Gen Ed Transfer - 2025

Category 6: Natural Sciences

Complete any two, including one with laboratory experience, from different disciplines, from the Michigan Transfer Agreement (MTA) list.

Complete at least 2 courses in the following course sets:
- CAT6 - Transfer - Lec and Lab - 2025
- CAT6 - Transfer - Lec Only - 2020
- CAT6 - Gen Ed Transfer - Lab Only - 2020

Category 7: General Education

Complete any additional General Education course from the Michigan Transfer Agreement (MTA) list to meet the 30 hour General Education requirement.

Degree Specific Requirements

Liberal Arts - Journalism AA - Degree Specific Course Requirements
Type
Completion Requirement

Computer Technology

Complete at least 1 of the following courses:
- CIS100-Intro Info Tech 3 credits

Additional Comments:
See Degree Specific Requirements for details.

GRPHDSGNCAREER.AAA - Graphic Design Career

Program Information

Program Title
Graphic Design Career

Program Code
GRPHDSGNCAREER.AAA

Degree Type
Associate in Applied Arts

Minimum Credits for Program Completion
64

Program Eligible for Financial Aid?
Yes

Subject
Graphic Design

Semesters to Complete Program
4

Program Description
This program is designed to provide students with skills both soft and digital that will prepare the student for an entry level position or an entrepreneurial role in the industry. This is a career program for students who do not plan to transfer and wish to seek either an entry level position or begin working with clients. The program provides a comprehensive foundation of study, emphasizing the development of theoretical, practical, and technical skills within the Graphic Design field. The program uses sequential courses that build and develop skills in a range of studio classes. Offers courses in print, front-end web design, motion graphics, and the business of design. Employs computer applications and tools as well as design techniques to assist the student in developing the range of skills necessary to compete in the multi-media field of graphic design.

Faculty Contact
Victoria Shepherd

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Faculty Contact Phone
313-845-6487

Faculty Contact Office Location
F-151

Academic Advisor
Sarah Krizan

Academic Advisor Contact Email
smkrizan@hfcc.edu

Academic Advisor Contact Phone
313-845-9889

Academic Advisor Office Location
K-248

School
Liberal Arts

Academic Department
Fine & Performing Arts

Program Learning Outcomes

Create visual communications for an intended message, from conceptual development to final artifact using a range of media, both traditional and digital, for final output both printed and digital.

Utilize current graphic design terminology and methodology as a basis for discussing and evaluating works of design, both student and professional.

Incorporate historic and contemporary design influences, both period and designer, in the creation of design solutions as well as understand the role of design in culture.

Implement appropriate typographic treatments for print and digital communications. This includes typesetting, legibility, hierarchy, and style to create engaging communication solutions.

Apply design processes to complete appropriate design solutions. This includes the ability to sketch and refine preliminary concepts, employ the elements and principles of design as well as color theory into effective solutions.

Utilize current industry software and equipment to construct vector and raster files for use in print, motion and digital outcomes. This includes appropriated file formats for saving work as well as for distribution of final output, and preparation for print or file transfer.

Learn how to build a design business practice. Topics include communicating, contracts and building a personal design identity.

Develop and present a portfolio of projects for use in seeking an entry-level position or transfer to a four-year degree program. Curate and exhibit projects in a graduating student exhibition

What Classes do I take?

2-Year Plan
Graphic Design Career - AAA: Recommended Sequence - Current
Total Credits
61 - 62
Description
Enrollment Status: Full Time

If you have questions about the order in which you should take these courses, or the availability of these courses, please contact your advisor or the faculty contact listed below.

Program Contact Information

Office Contact: School of Liberal Arts: 313-845-9624, lainfo@hfcc.edu, Liberal Arts Building, Room: K-201 and F-138

Faculty Contact: Victoria Shepherd: 313-845-6487, vashepherd@hfcc.edu, Fine Arts Bldg, Room: F-151

Academic Advisor: Sarah Krizan: 313-845-9889, smkrizan@hfcc.edu, Liberal Arts Bldg, Room: K-248

For students in an older version of this program, please visit Henry Ford College Catalog Archive to view required courses.

Year	Semester	Semester Credits
Year 1	Fall	15

Courses
- ART101 - Two-Dimensional Design

Semester Credits 3
Contact Hours 92

Courses
- ART104 - Color Theory

Semester Credits 3
Contact Hours 92

Courses
- ART107 - Photoshop

Semester Credits
3
Contact Hours
47

Courses
- Category 1: English Composition: Complete any one. (Generic)

Semester Credits
3
Contact Hours
47

Courses
- Category 4: Social Sciences: Complete any one. (Generic)

Semester Credits
3
Contact Hours
47

Year	Semester	Semester Credits
Year 1	Winter	16

Courses
- ART114 - Graphic Design Studio 1

Semester Credits
3
Contact Hours
92

Courses
- ART130 - History of Graphic Design

Semester Credits
3
Contact Hours
47

Courses
- CIS126 - HTML/CSS Web Programming

Semester Credits
4
Contact Hours
62

Courses
- Category 2: English Composition or Communication: Complete any one. (Generic)

Semester Credits
3
Contact Hours
47

Courses
- Category 4: Social Sciences: Complete any one, from a different discipline. (Generic)

Semester Credits
3
Contact Hours
47

Year	Semester	Semester Credits
Year 2	Fall	15

Courses
- ART150 - Digital Photography I

Semester Credits
3
Contact Hours
92

Courses
- ART165 - Typography

Semester Credits
3
Contact Hours
92

Courses
- ART214 - Graphic Design Studio 2

Semester Credits
3
Contact Hours
92

Courses
- ART245 - Interactive Experience Design

Semester Credits
3
Contact Hours
92

Courses
- Category 5: Humanities: Complete any one from a different discipline (not ART). (Generic)

Semester Credits
3
Contact Hours
47

Year	Semester	Semester Credits
Year 2	Winter	15 - 16

Courses
- ART230 - Inactive Course (Generic)

Semester Credits 3
Contact Hours 92

Courses
- ART265 - Illustration

Semester Credits 3
Contact Hours 92

Courses
- ART272 - Design Entrepreneur

Semester Credits 3
Contact Hours 47

Courses
- ART275 - Advanced Projects

Semester Credits 3
Contact Hours 47

Courses
- ART108 - Introduction to Animation
  OR
- ART250 - Digital Photography II
  OR
- CIS172 - JavaScript
  OR
- CIS227 - Content Management Systems
  OR
- TCM241 - Media Writing
  OR
- TCM151 - Digital Audio Editing
  OR
- TCM251 - Audio Production
  OR
- TCM257 - Video Production I

Semester Credits 3 - 4
Contact Hours 16 - 92

Program Requirements

Minimum Credits for Program Completion
61
Minimum GPA required for Graduation
2.000
HFC Credit Hour Residency Requirement
20

Simple Requisites

Core Course Requirements

Graphic Design Career AAA - Core Course Requirements
Type
Completion Requirement

Complete ALL of the following Courses:
- ART102-Drawing I 3 credits
- ART107-Photoshop 3 credits
- ART111-Digital Media 3 credits
- ART114-Graphic Design Studio 1 3 credits
- ART117-Story Boarding for Design 3 credits
- ART130-History of Graphic Desgn 3 credits
- ART165-Typography 3 credits
- ART214-Graphic Design Studio 2 3 credits
- CIS126-HTML/CSS Web Programming 4 credits
- ART245-Interactive Experience Design 3 credits
- ART255-Time Based Graphics 3 credits
- ART265-Illustration 3 credits
- ART272-Design Entrepreneur 3 credits

Support Course Requirements

Graphic Design Career AAA - Support Course Requirements
Type
Completion Requirement

Complete ALL of the following Courses:
- ART275-Advanced Projects 3 credits

Graphic Design

Earn at least 3 credits from the following:
- ART250-Digital Photography II 3 credits
  OR CIS172-JavaScript 3 credits
  OR CIS227-Content Management Systems 4 credits
  OR MCA241-Media Writing 3 credits
  OR MCA151-Digital Audio Editing 1 credits
  OR MCA251-Audio Production 3 credits
  OR MCA257-Video Production 3 credits

Graphic Design

Earn at least 3 credits from the following:
- ART101-Two Dimensional Design 3 credits
  OR ART104-Color Theory 3 credits
  OR ART105-Three Dimensional Design 3 credits
  OR ART112-Drawing II 3 credits
  OR ART150-Digital Photography I 3 credits

General Education Requirements

Graphic Design Career AAA - General Education Course Requirements
Type
Completion Requirement

Category 1: English Composition

Complete at least 1 courses in the following course sets:
- CAT1 - Gen Ed Applied - 2020

Category 2: English Composition or Communications

Complete at least 1 courses in the following course sets:

- CAT2 - Gen Ed Applied - 2020

Category 4: Social Sciences

Complete at least 2 courses in the following course sets:

- CAT4 - Gen Ed Applied - 2020

Category 5: Humanities and Fine Arts

Complete any one from a different discipline (not ART).

Complete at least 1 courses in the following course sets:

- Untitled Course set

Additional Comments:
See General Education Requirements for Applied Degrees for details.

HRMGT.AAS - Hotel/Restaurant Management

Program Information

Program Title
Hotel Restaurant Management AAS Degree

Program Code
HRMGT.AAS

Degree Type
Associate in Applied Science

Minimum Credits for Program Completion
72

Program Eligible for Financial Aid?
Yes

Subject
Culinary Arts, Hospitality Mgm

Semesters to Complete Program
5

Program Description
Provides opportunities for students to build character, leadership, and technical skills critical for success in the global industry of hospitality and tourism. For a four-year degree in Hospitality Management, continue in Henry Ford College s Bachelor of Science in Culinary Arts degree.

Program Accreditation Information
Courses in the Hotel/Restaurant Management curriculum are supported by materials and certification exams from the American Hotel & Lodging Educational Institute, National Restaurant Association Educational Foundation, and Federation of Dining Room Professionals.

Instructors receive training and certifications from the American Hotel & Lodging Educational Institute, The National Restaurant Association Educational Foundation, the Federation of Dining Room Professionals and the American Culinary Federation.

Faculty Contact
Eric Gackenbach

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Faculty Contact Office Location
N-155B

Academic Advisor
Ashlei Chears

Academic Advisor Contact Email
achears@hfcc.edu

Academic Advisor Contact Phone
313-845-6486

Academic Advisor Office Location
E-211H

School
Business, Entrepreneurship, PD

Academic Department
Culinary Arts + Hospitality Management

Admissions Requirements

Admissions Requirements
Additional Program Requirements

Official chef's uniform required to be purchased prior to beginning class for culinary lab courses. Visit the Hospitality Department in M-163 in the Culinary Arts & Student Center building, or our Culinary Arts website for uniform ordering information.

Program Learning Outcomes

Relate restaurant operations and scenarios to FDRP standards and procedures.

Based on MLCC and MRA standards, assess when and how beer, wine, and spirits are served in a licensed establishment.

Based on NRA standards, decide how to handle various types of food in order to prevent food borne illness.

Incorporate professional work behaviors to complete 300 hours of supervised internship.

Organize examples of various segments (non-commercial, lodging, sports and leisure, restaurant, casino) and job opportunities in the hospitality industry.

Combine principles of management, marketing, accounting, finance, and economics as they relate to decision-making in the hospitality industry.

What Classes do I take?

2-Year Plan
Hotel/Restaurant Management - AAS: Recommended Sequence - Current
Total Credits
73 - 74
Description
Enrollment Status: Full Time

If you have questions about the order in which you should take these courses, or the availability of these courses, please contact your advisor or the faculty contact listed below.

Program Contact Information

Office Contact: School of Business, Entrepreneurship, and Professional Development: 313-845-9645, bepdinfo@hfcc.edu, Technology Bldg, Room: E-211

Faculty Contact: Eric Gackenbach: 313-317-1572, epgackenbach@hfcc.edu, Campus Safety, Room: N-155B

Academic Advisor: Ashlei Chears: 313-845-6486, achears@hfcc.edu, Technology Bldg, Room: E-211H

For students in an older version of this program, please visit Henry Ford College Catalog Archive to view required courses.

Year	Semester	Semester Credits
Year 1	Fall	14

Courses

- HOSP105 - Applied Food Service Sanitation

Semester Credits	2
Contact Hours	32

Courses

- HOSP220 - Introduction to Baking and Cooking

Semester Credits	2
Contact Hours	32

Courses
- HOSP224 - Culinary Skills and Nutritional Cooking

Semester Credits
3
Contact Hours
69.5

Courses
- HOSP226 - Fundamentals of Baking

Semester Credits
3
Contact Hours
69.5

Courses
- MATH104 - Mathematics for Food Service Careers

Semester Credits
4
Contact Hours
62

Year	Semester	Semester Credits
Year 1	Winter	17

Courses
- HOSP211 - Introduction to the Hospitality Industry

Semester Credits
3
Contact Hours
47

Courses
- HOSP340 - A'la Carte and Buffet Cookery

Semester Credits
8
Contact Hours
152

Courses
- ENG131 - Introduction to College Writing

Semester Credits
3
Contact Hours
47

Courses
- CIS100 - Introduction to Information Technology

Semester Credits
3
Contact Hours
47

Year	Semester	Semester Credits
Year 1	Summer	11 - 12

Courses
- HOSP221 - Front Office Procedures & Guest Service

Semester Credits
3
Contact Hours
47

Courses
- HOSP290 - Co-op in Hospitality

Semester Credits
2
Contact Hours
3 - 300

Courses
- ENG132 - College Writing and Research
  OR
- ENG132H - Honors College Writing and Research
  OR
- ENG135 - Business & Technical Writing & Research

Semester Credits
3
Contact Hours
47

Courses
- HOSP101 - Wines of the World
  OR
- HOSP103 - Major Wines Grape Varieties
  OR
- HOSP107 - Artisanal Cheese and Craft Beer
  OR
- HOSP145 - Ice Carving and Design
  OR
- HOSP215 - International Cooking
  OR
- HOSP235 - Ice Carving for the Professional
  OR
- HOSP245 - Hotel and Restaurant Desserts
  OR
- HOSP255 - Professional Cake Decorating
  OR
- HOSP309 - Meetings and Event Planning

Semester Credits
3 - 4
Contact Hours
16 - 62

Year	Semester	Semester Credits
Year 2	Fall	15

Courses
- HOSP251 - Dining Room Service and Operations

Semester Credits 3
Contact Hours 62

Courses
- HOSP310 - Hospitality Supervision and Leadership

Semester Credits 3
Contact Hours 47

Courses
- HOSP330 - Food and Nutrition

Semester Credits 3
Contact Hours 47

Courses
- HOSP370 - Food and Beverage Controls

Semester Credits 3
Contact Hours 47

Courses
- POLS131 - Intro to American Gov't & Politi Science

Semester Credits 3
Contact Hours 47

Year	Semester	Semester Credits
Year 2	Winter	16

Courses
- HOSP250 - Hospitality and Travel Marketing

Semester Credits 3
Contact Hours 47

Courses
- HOSP270 - Facilities Management

Semester Credits 3
Contact Hours 47

Courses
- HOSP325 - Dining Room Captain

Semester Credits 3
Contact Hours 62

Courses
- HOSP360 - Hospitality Purchasing

Semester Credits 3
Contact Hours 47

Courses
- BAC110 - Practical Accounting
  OR
- BAC131 - Introduction to Financial Accounting

Semester Credits 4
Contact Hours 62

Program Requirements

Minimum Credits for Program Completion
72
Minimum GPA required for Graduation
2.000
HFC Credit Hour Residency Requirement
20

Simple Requisites

Core Course Requirements

Hotel Restaurant Management AAS - Core Course Requirements
Type
Completion Requirement

Complete ALL of the following Courses:
- HOSP105-Applied Food Serv Sanitation 2 credits
- HOSP211-Intro to Hospitality Industry 3 credits
- HOSP221-Front Office Procedures 3 credits
- HOSP224-Culinary Skills & Nutritional 3 credits
- HOSP226-Fundamentals of Baking 3 credits
- HOSP250-Hospitality & Travel Marketing 3 credits
- HOSP251-Dining Room Service & Operati 3 credits
- HOSP270-Facilities Management 3 credits
- HOSP310-Hosp Supervision & Leadership 3 credits
- HOSP325-Dining Room Captain 3 credits
- HOSP330-Food and Nutrition 3 credits
- HOSP340-A'la Carte and Buffet Cookery 8 credits
- HOSP360-Hospitality Purchasing 3 credits
- HOSP370-Food and Beverage Controls 3 credits

Hospitality Co-Op

Earn at least 2 credits from the following:
- HOSP190-Co-op in Hospitality 1 credits
  OR HOSP290-Co-op in Hospitality 2 credits

Additional Comments:
NOTE: HOSP220 Intro to Baking & Cooking (2 credit hours), HOSP224 Culinary Skills & Nutritional (3 credit hours), and HOSP226 Fundamentals of Baking (3 credit hours) must be taken concurrently.

*Students may take HOSP190 Co-op in Hospitality (minimum of 150 working hours for two semesters) instead of HOSP290 Co-op in Hospitality (minimum of 300 hours in one semester).

Support Course Requirements

Hotel Restaurant Management AAS - Support Course Requirements
Type
Completion Requirement

Category 1: English Composition

Complete ALL of the following Courses:

- ENG131-Introduction College Writing 3 credits

Computer Technology

Complete ALL of the following Courses:

- CIS100-Intro Info Tech 3 credits

Accounting

Complete at least 1 of the following courses:

- BAC110-Practical Accounting 4 credits
  OR BAC131-Intro to Financial Accounting 4 credits

Category 2: English Composition or Communications

Complete at least 1 of the following courses:

- ENG132-College Writing and Research 3 credits
  OR ENG132H-Honors Coll Writing & Research 3 credits
  OR ENG135-Bus & Tech Writing & Research 3 credits

Hotel/Restaurant Support

Earn at least 3 credits from the following:

- HOSP101-Wines of the World 1 credits
  OR HOSP103-Maj Wine Grape Var 1 credits
  OR HOSP107-Artisanal Cheese & Craft Beer 1 credits
  OR HOSP145-Ice Carving and Design 3 credits
  OR HOSP215-International Cooking 4 credits
  OR HOSP235-Ice Carving for Professional 3 credits
  OR HOSP245-Hotel & Rest Desserts 3 credits
  OR HOSP255-Professional Cake Decorating 3 credits
  OR HOSP309-Meetings and Event Planning 3 credits

Category 3: Mathematics

Complete at least 1 of the following courses:

- BMA110-Business Math 3 credits
  OR MATH104-Math for Food Service Careers 4 credits
  OR
  OR MATH110-Intermediate Algebra 4 credits

General Education Requirements

Hotel Restaurant Management AAS - General Education Course Requirements
Type
Completion Requirement

Category 7: General Education

Complete at least 1 courses in the following course sets:

- Gen Ed - 3 hrs - 2025

Additional Comments:
See General Education Requirements for Applied Degrees for details.

HTLSRVCS.CA - Hotel Services

Program Information

Program Title
Hotel Services

Program Code
HTLSRVCS.CA

Degree Type
Certificate of Achievement

Minimum Credits for Program Completion
17

Program Eligible for Financial Aid?
Yes

Subject
Culinary Arts, Hospitality Mgm

Semesters to Complete Program
2

Program Description
Provides opportunities for students to build character, leadership, and technical skills critical for success in the global industry of hospitality and tourism. For degrees in Hospitality Management, continue with the Associate Degree in Hotel/Restaurant Management and Bachelor of Science Degree at Henry Ford College.

Program Accreditation Information
Courses in the Hotel/Restaurant Management curriculum are supported by materials and certification exams from the American Hotel & Lodging Educational Institute, National Restaurant Association Educational Foundation, and Federation of Dining Room Professionals.

Instructors receive training and certifications from the American Hotel & Lodging Educational Institute, The National Restaurant Association Educational Foundation, the Federation of Dining Room Professionals and the American Culinary Federation.

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Academic Advisor Office Location
E-211H

School
Business, Entrepreneurship, PD

Academic Department
Culinary Arts + Hospitality Management

Program Learning Outcomes

List, discuss and name companies in multiple segments of the Hospitality industry. List and describe entry level supervisory positions currently available in the marketplace within each segment.

Achieve the designation of National Restaurant Association Serv-Safe Certified Food Protection Manager.

Describe the functions of the night audit and various financial reports prepared by the front desk.

Identify various types of hotels in terms of service they provide for the guest.

Explain the relationship between the housekeeping, front office, maintenance, and food and beverage departments.

What Classes do I take?

2-Year Plan
Hotel Services - CA: Recommended Sequence - Current
Total Credits
17
Description
Enrollment Status: Full Time

If you have questions about the order in which you should take these courses, or the availability of these courses, please contact your advisor or the faculty contact listed below.

Program Contact Information

Office Contact: School of Business, Entrepreneurship, and Professional Development: 313-845-9645, bepdinfo@hfcc.edu, Technology Bldg, Room: E-211

Faculty Contact: Eric Gackenbach: 313-317-1572, epgackenbach@hfcc.edu, Campus Safety, Room: N-155B

Academic Advisor: Ashlei Chears: 313-845-6486, achears@hfcc.edu, Technology Bldg, Room: E-211H

For students in an older version of this program, please visit Henry Ford College Catalog Archive to view required courses.

Year	Semester	Semester Credits
Year 1	Fall	5

Courses

- HOSP105 - Applied Food Service Sanitation

Semester Credits 2
Contact Hours 32

Courses

- HOSP211 - Introduction to the Hospitality Industry

Semester Credits 3
Contact Hours 47

Year	Semester	Semester Credits
Year 1	Winter	12

Courses

- HOSP221 - Front Office Procedures & Guest Service

Semester Credits 3
Contact Hours 47

Courses

- HOSP250 - Hospitality and Travel Marketing

Semester Credits 3
Contact Hours 47

Courses
- HOSP270 - Facilities Management

Semester Credits
3
Contact Hours
47

Courses
- HOSP310 - Hospitality Supervision and Leadership

Semester Credits
3
Contact Hours
47

Program Requirements

Minimum Credits for Program Completion
17

Minimum GPA required for Graduation
2.000

HFC Credit Hour Residency Requirement
20

Simple Requisites

Core Course Requirements

Hotel Services CA - Core Course Requirements
Type
Completion Requirement

Complete ALL of the following Courses:
- HOSP105-Applied Food Serv Sanitation 2 credits
- HOSP211-Intro to Hospitality Industry 3 credits
- HOSP221-Front Office Procedures 3 credits
- HOSP250-Hospitality & Travel Marketing 3 credits
- HOSP270-Facilities Management 3 credits
- HOSP310-Hosp Supervision & Leadership 3 credits

HVACTECH.CA - HVAC Technician

Program Information

Program Title
HVAC Technician

Program Code
HVACTECH.CA

Degree Type
Certificate of Achievement

Minimum Credits for Program Completion
36

Program Eligible for Financial Aid?
Yes

Subject
Energy Technology

Semesters to Complete Program
3

Program Description
Designed to provide students the necessary skills required to enter the HVACR industry. Provides both theory and laboratory experiences as well as advanced course work in both residential and commercial heating, cooling, refrigeration, light commercial controls, heating and cooling mechanical codes, installation, energy management, and energy system design. The program offers opportunities to receive several industry recognized certificates.

Faculty Contact
Gregory Ward

Faculty Contact Email
gmward16192@hfcc.edu

Faculty Contact Phone
313-845-7146

Faculty Contact Office Location
E-164F

Academic Advisor
Rachel Vanzutphen

Academic Advisor Contact Email
rvanzutphen@hfcc.edu

Academic Advisor Contact Phone
313-845-9873

Academic Advisor Office Location
E-211L

School
Business, Entrepreneurship, PD

Academic Department
Building Sciences

Program Learning Outcomes

Use proper tools, materials, and equipment necessary for completing mechanical operations on residential and light commercial HVAC-R systems and equipment.

Demonstrate both soft skills and communication skills including reading comprehension, computer skills, communication, and customer service.

Troubleshoot electrical systems and controls in HVAC-R equipment.

Interpret mechanical, electrical, and control diagrams relevant to the HVAC-R industry.

Design and select equipment for HVAC-R systems including duct work.

Apply manufacturer specifications for HVAC-R equipment and systems.

What Classes do I take?

2-Year Plan
HVAC Technician - CA: Recommended Sequence - Current
Total Credits
36
Description
Enrollment Status: Full Time

If you have questions about the order in which you should take these courses, or the availability of these courses, please contact your advisor or the faculty contact listed below.

Program Contact Information

Office Contact: School of Business, Entrepreneurship, and Professional Development: 313-845-9645, bepdinfo@hfcc.edu, Technology Bldg, Room: E-211

Faculty Contact: Gregory Ward: 313-845-7146, gmward16192@hfcc.edu, Technology Bldg, Room: E-164F

Academic Advisor: Rachel Vanzutphen: 313-845-9873, rvanzutphen@hfcc.edu, Technology Bldg, Room: E-211L

For students in an older version of this program, please visit Henry Ford College Catalog Archive to view required courses.

Year	Semester	Semester Credits
Year 1	Fall	12

Courses
- TAFD120 - Industrial Safety Awareness

Semester Credits 2
Contact Hours 32

Courses
- BLDE101 - Introduction to Energy Technology

Semester Credits 3
Contact Hours 47

Courses
- BLDE103 - AC/DC Electricity

Semester Credits 3
Contact Hours 47

Courses
- BLDE131 - Heating Technology

Semester Credits 4
Contact Hours 62

Year	Semester	Semester Credits
Year 1	Winter	12

Courses
- BLDE205 - Refrigeration Technology

Semester Credits 4
Contact Hours 62

Courses
- BLDE151 - Air Conditioning Technology

Semester Credits
4
Contact Hours
62

Courses
- BLDE200 - Commercial Heating

Semester Credits
4
Contact Hours
62

Year	Semester	Semester Credits
Year 2	Fall	12

Courses
- BLDE240 - Energy Systems Design

Semester Credits
4
Contact Hours
62

Courses
- BLDE250 - Energy Audit & Certification

Semester Credits
4
Contact Hours
62

Courses
- ICO190 - Co-op in Industrial Technology

Semester Credits
1
Contact Hours
3 - 75

Courses
- BLDE295 - N American Technician Excellence Certifi

Semester Credits
3
Contact Hours
47

Program Requirements

Minimum Credits for Program Completion
36
Minimum GPA required for Graduation
2.000
HFC Credit Hour Residency Requirement
20

Simple Requisites

Core Course Requirements

HVAC Technician CA - Core Course Requirements
Type
Completion Requirement

Complete ALL of the following Courses:
- TAFD120-Industrial Safety Awareness 2 credits
- BLDE101-Intro to Energy Technology 3 credits
- BLDE103-AC/DC Electricity 3 credits
- BLDE131-Heating Technology 4 credits
- BLDE151-Air Conditioning Technology 4 credits
- BLDE200-Commercial Heating 4 credits
- BLDE205-Refrigeration Technology 4 credits
- BLDE240-Energy Systems Design 4 credits
- BLDE250-Energy Audit & Certification 4 credits
- BLDE295-N American Tech Excellence Cer 3 credits
- ICO190-Co-op in Industrial Technolog 1 credits

INDSG.AAS - Interior Design

Program Information

Program Title
Interior Design AAS Degree
Program Code
INDSG.AAS
Degree Type
Associate in Applied Science
Minimum Credits for Program Completion
61
Program Eligible for Financial Aid?
Yes
Subject
Interior Design
Semesters to Complete Program
5
Program Description
Provides a comprehensive foundation of study, emphasizing the development of theoretical, practical, and technical skills within the interior environment. This specialization is developed and formed utilizing sequential courses with specific course work in environmental psychology, architectural and interior construction materials and components, lighting and environmental systems, and a range of studio classes. The environmental systems course group will focus on building codes, sustainability, and energy conservation. Graphic, oral and written communication, and presentation skills will be evaluated and enhanced. Computer applications are employed and utilized across the core courses to assist students in developing a broad range of computer skills including Computer Aided Design (CAD).

Faculty Contact
Chad Richert
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crichert@hfcc.edu
Faculty Contact Phone
313-317-1515
Faculty Contact Office Location
E-115C
Academic Advisor
Rachel Vanzutphen
Academic Advisor Contact Email
rvanzutphen@hfcc.edu
Academic Advisor Contact Phone
313-845-9873
Academic Advisor Office Location
E-211L
School
Business, Entrepreneurship, PD
Academic Department
Building Sciences

Program Learning Outcomes

Produce 2-D and 3-D schematic construction drawings employing technical manual and computer generated architectural drafting skills.

Exhibit artistic 2-D and 3-D visual communication and presentation skills conveying interior environments through perspective drawing, sketching, rendering and model making.

Exhibit proficient written communication skills essential to conveying aesthetic concepts, specifications, installation instructions and programming documents.

Professionally present aesthetic and functional design solutions for small-scale commercial and residential projects that meet user physiological, sociological and psychological needs and its impact on environmental, energy and economic issues.

Create a professional-quality student design portfolio to successfully enter a career in the interior design industry or pursue a bachelors degree at a four-year institution.

What Classes do I take?

2-Year Plan
Interior Design - AAS: Recommended Sequence - Current
Total Credits
58
Description
Enrollment Status: Full Time

If you have questions about the order in which you should take these courses, or the availability of these courses, please contact your advisor or the faculty contact listed below.

Program Contact Information

Office Contact: School of Business, Entrepreneurship, and Professional Development: 313-845-9645, bepdinfo@hfcc.edu, Technology Bldg, Room: E-211

Faculty Contact: Chad Richert: 313-317-1515, crichert@hfcc.edu, Technology Bldg, Room: E-115C

Academic Advisor: Rachel Vanzutphen: 313-845-9873, rvanzutphen@hfcc.edu, Technology Bldg, Room: E-211L

For students in an older version of this program, please visit Henry Ford College Catalog Archive to view required courses.

Year	Semester	Semester Credits
Year 1	Fall	14

Courses
- BLDA100 - Introduction to Autocad

Semester Credits 4
Contact Hours 77

Courses
- BLDA110 - Visual Communications

Semester Credits 4
Contact Hours 77

Courses
- BLDI120 - Principles of Design

Semester Credits 3
Contact Hours 47

Courses
- BLDI130 - Design & User Needs

Semester Credits 3
Contact Hours 47

Year	Semester	Semester Credits
Year 1	Winter	14

Courses
- BLDA130 - Introduction to Revit

Semester Credits
4
Contact Hours
77

Courses
- BLDI140 - Interior Design Materials & Components

Semester Credits
3
Contact Hours
47

Courses
- BLDI150 - Lighting & Environmental Systems Interio

Semester Credits
3
Contact Hours
47

Courses
- BLDI200 - Bath Design Studio

Semester Credits
4
Contact Hours
77

Year	Semester	Semester Credits
Year 1	Summer	3

Courses
- CIS100 - Introduction to Information Technology
  OR
- CIS221 - Instructional Tech Educators (Pre K-12)

Semester Credits
3
Contact Hours
47

Year	Semester	Semester Credits
Year 2	Fall	14

Courses
- BLDI220 - Kitchen Design Studio

Semester Credits
4
Contact Hours
77

Courses
- BLDI230 - Residential Design Studio

Semester Credits
4
Contact Hours
77

Courses
- BLDI290 - Professional Practice Interior Designers

Semester Credits
3
Contact Hours
47

Courses
- ENG131 - Introduction to College Writing

Semester Credits
3
Contact Hours
47

Year	Semester	Semester Credits
Year 2	Winter	13

Courses
- BLDI270 - Commercial Design Studio

Semester Credits
4
Contact Hours
77

Courses
- Electives: Complete additional 100-level, or higher, credits to complete this degree. (Generic)

Semester Credits
3
Contact Hours
47

Courses
- CAT3 - Gen Ed Applied - 2025

Semester Credits
3
Contact Hours
47

Courses
- ENG132 - College Writing and Research
  OR
- ENG132H - Honors College Writing and Research
  OR
- ENG135 - Business & Technical Writing & Research

Semester Credits 3
Contact Hours 47

Program Requirements

Minimum Credits for Program Completion
61
Minimum GPA required for Graduation
2.000
HFC Credit Hour Residency Requirement
20

Simple Requisites

Core Course Requirements

Interior Design AAS - Core Course Requirements
Type
Completion Requirement

Complete ALL of the following Courses:
- BLDA100-Introduction to Autocad 4 credits
- BLDA110-Visual Communications 4 credits
- BLDA130-Introduction to Revit 4 credits
- BLDI120-Principles of Design 3 credits
- BLDI130-Design & User Needs 3 credits
- BLDI140-Interior Design Mat & Comp 3 credits
- BLDI150-Light & Environ Sys for Interi 3 credits
- BLDI200-Bath Design Studio 4 credits
- BLDI220-Kitchen Design Studio 4 credits
- BLDI230-Residential Design Studio 4 credits
- BLDI270-Commercial Design Studio 4 credits
- BLDI290-Professional Practice for ID 3 credits

Support Course Requirements

Interior Design AAS - Support Course Requirements
Type
Completion Requirement

Computer Technology

Complete at least 1 of the following courses:
- CIS100-Intro Info Tech 3 credits
  OR CIS221-Instruction Tech for Educators 3 credits

Electives

Choose any BLDA, ACT, INTR, OR ART102 Drawing I

Earn at least 3 credits

General Education Requirements

Interior Design AAS - General Education Course Requirements
Type
Completion Requirement

Category 1: English Composition

Complete at least 1 courses in the following course sets:
- CAT1 - Gen Ed Applied - 2020

Category 3: Mathematics

Complete at least 1 courses in the following course sets:
- CAT3 - Gen Ed Applied - 2025

Category 7: General Education

Earn at least 6 credits from the following:
- Gen Ed - 6 hrs - 2025

Additional Comments:
See General Education Requirements for Applied Degrees for details.

INDUSELEC.TA.CA - Industrial Electrician

Program Information

Program Title
Industrial Electrician

Program Code
INDUSELEC.TA.CA

Degree Type
Certificate of Achievement

Subject
Skilled Trade & Apprenticeship

Program Description
Provide students with the opportunity to work on the installation, maintenance, and repair of electrical wiring, equipment, and fixtures. Students will demonstrate that their work is in accordance with relevant codes.

Faculty Contact
Richard Cieslak

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rfcieslak@hfcc.edu

Faculty Contact Phone
313-845-9645

Faculty Contact Office Location
E-164

Academic Advisor
Rachel VanZutphen

Academic Advisor Contact Email
rvanzutphen@hfcc.edu

Academic Advisor Contact Phone
313-845-9873

Academic Advisor Office Location
E-211L

School
Business, Entrepreneurship, PD

Academic Department
Skilled Trade & Apprenticeship

Admissions Requirements

Admissions Requirements
Additional Program Requirements

Complete a minimum of 38 additional credit hours in courses required within your specialization.

Program Learning Outcomes

Plan layout and installation of electrical wiring, equipment, or fixtures, based on job specifications and local codes.

Connect wires to circuit breakers, transformers, or other components.

Test electrical systems or continuity of circuits in electrical wiring equipment, or fixtures, using testing devices, such as ohmmeters, voltmeters, or oscilloscopes, to ensure compatibility and safety of system.

Use a variety of tools or equipment, such as power construction equipment, measuring devices, power tools, and testing equipment, such as oscilloscopes, ammeters, or test lamps.

Inspect electrical systems, equipment, or components to identify hazards, defects, or the need for adjustment or repair, and to ensure compliance with codes.

What Classes do I take?

2-Year Plan
See Related RTI under program requirements
Total Credits
0

Program Requirements

Minimum Credits for Program Completion
3

Minimum GPA required for Graduation
2.000

HFC Credit Hour Residency Requirement
20

Simple Requisites

Core Course Requirements

Industrial Electrician CA - Core Course Requirements
Type
Completion Requirement

Credit Hours: 3

Complete ALL of the following Courses:
- TAMA120-Indust Appl of Algebraic Princ 3 credits

Electrical: Complete courses based on specific company RTI

Credit Hours: 35

Enroll in the following Courses:
- TAEL103-DC & AC Electricity 4 credits
- TAEL105-AC Theory & Equipment 4 credits
- TAEL106-Electronics Theory 4 credits
- TAEL145-DC and AC Motors 4 credits
- TAEL200-Ladder Diagrams & Control 4 credits
- TAEL245-Program Logic Controller 4 credits
- TAEL265-National Electrical Code 2 credits
- TAEL273-Fire Alarm Sys for Electrician 1 credits
- TAEL275-Residential Wiring 2 credits
- TAEL276-Commercial Wiring 2 credits
- TAEL277-Industrial Wiring 2 credits
- TAEL280-Low Voltage & Comm 2 credits

Electives: Complete courses based on specific company RTI

Enroll in the following Courses:
- ELEC255-Instrumentation Systems 3 credits
- MFMT224-Automated Control Systems I 2 credits
- TADV125-Intro Integrated Manufacturing 1 credits
- TAEL260-Automation Controls Robotics 4 credits
- TAEL290-High Volt Power Distribution 2 credits
- TAFD117-Industrial Computer Applicatio 3 credits
- TAFD120-Industrial Safety Awareness 2 credits
- TAFD130-Indust App of Phys Science 3 credits
- TAFD150-Applied Technology 3 credits
- TAFP150-Intro to Industrial Hydraulics 4 credits
- TAMA110-Industrial Appl of Basic Math 2 credits
- TAMT200-Predictive Maint Shaft Align 2 credits
- TAPI105-Intro Indust & Pneumatic Ctrls 3 credits
- TAPI120-Instrumentation: Print Reading 2 credits

Optional Courses: Complete courses based on specific company RTI

Enroll in the following Courses:
- ELEC115-Digital Circuits 1 3 credits
- TADV182-Special Topics Skilled Trades 2 credits

Industrial Electrician - AK Steel (F78)
Type
Completion Requirement

Credit Hours: 37

Complete ALL of the following Courses:
- TAEL103-DC & AC Electricity 4 credits
- TAEL105-AC Theory & Equipment 4 credits
- TAEL106-Electronics Theory 4 credits
- TAEL145-DC and AC Motors 4 credits
- TAEL200-Ladder Diagrams & Control 4 credits
- TAEL245-Program Logic Controller 4 credits
- TAEL273-Fire Alarm Sys for Electrician 1 credits
- TAEL275-Residential Wiring 2 credits
- TAEL276-Commercial Wiring 2 credits
- TAEL277-Industrial Wiring 2 credits
- TAEL265-National Electrical Code 2 credits
- TAEL280-Low Voltage & Comm 2 credits
- TAEL290-High Volt Power Distribution 2 credits

Energy Technology

Credit Hours: 5

Complete ALL of the following Courses:
- ELEC255-Instrumentation Systems 3 credits
- MFMT224-Automated Control Systems I 2 credits

Foundation

Credit Hours: 8

Complete ALL of the following Courses:
- TADV125-Intro Integrated Manufacturing 1 credits
- TAFD117-Industrial Computer Applicatio 3 credits
- TAFD130-Indust App of Phys Science 3 credits

Fluid Power Systems

Credit Hours: 4

Complete ALL of the following Courses:
- TAFP150-Intro to Industrial Hydraulics 4 credits

Industrial Mathematics

Credit Hours: 5

Complete ALL of the following Courses:
- TAMA110-Industrial Appl of Basic Math 2 credits
- TAMA120-Indust Appl of Algebraic Princ 3 credits

Materials Joining & Fabrication

Credit Hours: 3

Complete ALL of the following Courses:

Maintenance Technology

Credit Hours: 2

Complete ALL of the following Courses:
- TAMT220-Advanced Rigging 2 credits

Process Instrumentation

Credit Hours: 5

Complete ALL of the following Courses:
- TAPI105-Intro Indust & Pneumatic Ctrls 3 credits
- TAPI120-Instrumentation: Print Reading 2 credits

Additional Comments:

INDUSTRIAL ELECTRICIAN	
Related Program: Industrial Electrician	**Related Apprenticeship Program:**
Employer Code: F78	**Employer Name**: AK Steel
RAPIDS:	**MARC:**
DOL Approved:	**Apprenticeship Code**:
CIP Code: 46.0302	**Minimum Total Credit Hours**: 68

Industrial Electrician - Diamler Chrysler (C98)
Type
Completion Requirement

Mathematics

Credit Hours: 5

Complete ALL of the following Courses:
- TAMA110-Industrial Appl of Basic Math 2 credits
- TAMA120-Indust Appl of Algebraic Princ 3 credits

Electrical

Credit Hours: 44

Complete ALL of the following Courses:
- TAEL103-DC & AC Electricity 4 credits

- TAEL105-AC Theory & Equipment 4 credits
- ELEC115-Digital Circuits 1 3 credits
- TAEL106-Electronics Theory 4 credits
- TAEL145-DC and AC Motors 4 credits
- TAEL200-Ladder Diagrams & Control 4 credits
- TAEL245-Program Logic Controller 4 credits
- TAEL260-Automation Controls Robotics 4 credits
- TAEL265-National Electrical Code 2 credits
- TAEL273-Fire Alarm Sys for Electrician 1 credits
- TAEL275-Residential Wiring 2 credits
- TAEL276-Commercial Wiring 2 credits
- TAEL277-Industrial Wiring 2 credits
- TAEL280-Low Voltage & Comm 2 credits
- TAEL290-High Volt Power Distribution 2 credits

Foundation

Credit Hours: 6

Complete ALL of the following Courses:

- TAFD120-Industrial Safety Awareness 2 credits
- TAFP150-Intro to Industrial Hydraulics 4 credits

Additional Comments:

INDUSTRIAL ELECTRICAN	
Related Program: Industrial Electrician	**Related Apprenticeship Program:**
Employer Code: C98	**Employer Name**: Diamler Chrysler
RAPIDS:	**MARC:**
DOL Approved:	**Apprenticeship Code**:
CIP Code: 46.0302	**Minimum Total Credit Hours**: 55

Industrial Electrician - AAI Services Flat Rock (F54)
Type
Completion Requirement

Mathematics

Credit Hours: 5

Complete ALL of the following Courses:

- TAMA110-Industrial Appl of Basic Math 2 credits
- TAMA120-Indust Appl of Algebraic Princ 3 credits

Electrical

Credit Hours: 41

Complete ALL of the following Courses:

- TAEL103-DC & AC Electricity 4 credits
- TAEL105-AC Theory & Equipment 4 credits
- TAEL106-Electronics Theory 4 credits
- TAEL145-DC and AC Motors 4 credits
- TAEL200-Ladder Diagrams & Control 4 credits
- TAEL245-Program Logic Controller 4 credits
- TAEL260-Automation Controls Robotics 4 credits
- TAEL265-National Electrical Code 2 credits
- TAEL273-Fire Alarm Sys for Electrician 1 credits
- TAEL275-Residential Wiring 2 credits
- TAEL276-Commercial Wiring 2 credits
- TAEL277-Industrial Wiring 2 credits
- TAEL280-Low Voltage & Comm 2 credits
- TAEL290-High Volt Power Distribution 2 credits

Additional Comments:

INDUSTRIAL ELECTRICIAN	
Related Program: Industrial Electrician	**Related Apprenticeship Program:**
Employer Code: F54	**Employer Name**: AAI Services Flat Rock
RAPIDS:	**MARC:**
DOL Approved:	**Apprenticeship Code**:
CIP Code: 46.0302	**Minimum Total Credit Hours**: 46

Industrial Electrician - FMC Livonia Transmission (F53)
Type
Completion Requirement

Mathematics

Credit Hours: 5

Complete ALL of the following Courses:

- TAMA110-Industrial Appl of Basic Math 2 credits
- TAMA120-Indust Appl of Algebraic Princ 3 credits

Electrical

Credit Hours: 41

Complete ALL of the following Courses:

- TAEL103-DC & AC Electricity 4 credits
- TAEL105-AC Theory & Equipment 4 credits
- TAEL106-Electronics Theory 4 credits
- TAEL145-DC and AC Motors 4 credits
- TAEL200-Ladder Diagrams & Control 4 credits
- TAEL245-Program Logic Controller 4 credits
- TAEL260-Automation Controls Robotics 4 credits
- TAEL265-National Electrical Code 2 credits
- TAEL273-Fire Alarm Sys for Electrician 1 credits
- TAEL275-Residential Wiring 2 credits
- TAEL276-Commercial Wiring 2 credits
- TAEL277-Industrial Wiring 2 credits
- TAEL280-Low Voltage & Comm 2 credits
- TAEL290-High Volt Power Distribution 2 credits

Additional Comments:

INDUSTRIAL ELECTRICIAN	
Related Program: Industrial Electrician	**Related Apprenticeship Program:**
Employer Code: F53	**Employer Name**: FMC - Livonia Transmission
RAPIDS:	**MARC:**
DOL Approved:	**Apprenticeship Code**:
CIP Code: 46.0302	**Minimum Total Credit Hours**: 46

Industrial Electrician - FMC MAP Final & Paint (F71)
Type
Completion Requirement

Mathematics

Credit Hours: 5

Complete ALL of the following Courses:

- TAMA110-Industrial Appl of Basic Math 2 credits
- TAMA120-Indust Appl of Algebraic Princ 3 credits

Electrical

Credit Hours: 41

Complete ALL of the following Courses:

- TAEL103-DC & AC Electricity 4 credits
- TAEL105-AC Theory & Equipment 4 credits
- TAEL106-Electronics Theory 4 credits
- TAEL145-DC and AC Motors 4 credits
- TAEL200-Ladder Diagrams & Control 4 credits
- TAEL245-Program Logic Controller 4 credits
- TAEL260-Automation Controls Robotics 4 credits
- TAEL265-National Electrical Code 2 credits
- TAEL273-Fire Alarm Sys for Electrician 1 credits
- TAEL275-Residential Wiring 2 credits
- TAEL276-Commercial Wiring 2 credits
- TAEL277-Industrial Wiring 2 credits
- TAEL280-Low Voltage & Comm 2 credits
- TAEL290-High Volt Power Distribution 2 credits

Additional Comments:

INDUSTRIAL ELECTRICIAN	
Related Program: Industrial Electrician	**Related Apprenticeship Program:**
Employer Code: F71	**Employer Name**: FMC - MAP Final & Paint
RAPIDS:	**MARC:**
DOL Approved:	**Apprenticeship Code**:
CIP Code: 46.0302	**Minimum Total Credit Hours**: 46

Industrial Electrician - FMC Rawsonville (F50)
Type
Completion Requirement

Mathematics

Credit Hours: 5

Complete ALL of the following Courses:

- TAMA110-Industrial Appl of Basic Math 2 credits
- TAMA120-Indust Appl of Algebraic Princ 3 credits

Electrical

Credit Hours: 41

Complete ALL of the following Courses:

- TAEL103-DC & AC Electricity 4 credits
- TAEL105-AC Theory & Equipment 4 credits
- TAEL106-Electronics Theory 4 credits
- TAEL145-DC and AC Motors 4 credits
- TAEL200-Ladder Diagrams & Control 4 credits
- TAEL245-Program Logic Controller 4 credits
- TAEL260-Automation Controls Robotics 4 credits
- TAEL265-National Electrical Code 2 credits
- TAEL273-Fire Alarm Sys for Electrician 1 credits
- TAEL275-Residential Wiring 2 credits
- TAEL276-Commercial Wiring 2 credits
- TAEL277-Industrial Wiring 2 credits
- TAEL280-Low Voltage & Comm 2 credits
- TAEL290-High Volt Power Distribution 2 credits

Additional Comments:

INDUSTRIAL ELECTRICIAN	
Related Program: Industrial Electrician	**Related Apprenticeship Program:**
Employer Code: F50	**Employer Name**: FMC - Rawsonville
RAPIDS:	**MARC:**
DOL Approved:	**Apprenticeship Code**:
CIP Code: 46.0302	**Minimum Total Credit Hours**: 46

Industrial Electrician - FMC Research & Engineering (F73)
Type
Completion Requirement

Mathematics

Credit Hours: 5

Complete ALL of the following Courses:
- TAMA110-Industrial Appl of Basic Math 2 credits
- TAMA120-Indust Appl of Algebraic Princ 3 credits

Electrical

Credit Hours: 41

Complete ALL of the following Courses:
- TAEL103-DC & AC Electricity 4 credits
- TAEL105-AC Theory & Equipment 4 credits
- TAEL106-Electronics Theory 4 credits
- TAEL145-DC and AC Motors 4 credits
- TAEL200-Ladder Diagrams & Control 4 credits
- TAEL245-Program Logic Controller 4 credits
- TAEL260-Automation Controls Robotics 4 credits
- TAEL265-National Electrical Code 2 credits
- TAEL273-Fire Alarm Sys for Electrician 1 credits
- TAEL275-Residential Wiring 2 credits
- TAEL276-Commercial Wiring 2 credits
- TAEL277-Industrial Wiring 2 credits
- TAEL280-Low Voltage & Comm 2 credits
- TAEL290-High Volt Power Distribution 2 credits

Additional Comments:

INDUSTRIAL ELECTRICIAN	
Related Program: Industrial Electrician	**Related Apprenticeship Program:**
Employer Code: F73	**Employer Name**: FMC - Research & Engineering
RAPIDS:	**MARC:**
DOL Approved:	**Apprenticeship Code**:
CIP Code: 46.0302	**Minimum Total Credit Hours**: 46

Industrial Electrician - FMC Rouge (F77)
Type
Completion Requirement

Mathematics

Credit Hours: 5

Complete ALL of the following Courses:
- TAMA110-Industrial Appl of Basic Math 2 credits
- TAMA120-Indust Appl of Algebraic Princ 3 credits

Electrical

Credit Hours: 41

Complete ALL of the following Courses:
- TAEL103-DC & AC Electricity 4 credits
- TAEL105-AC Theory & Equipment 4 credits
- TAEL106-Electronics Theory 4 credits
- TAEL145-DC and AC Motors 4 credits
- TAEL200-Ladder Diagrams & Control 4 credits
- TAEL245-Program Logic Controller 4 credits
- TAEL260-Automation Controls Robotics 4 credits
- TAEL265-National Electrical Code 2 credits
- TAEL273-Fire Alarm Sys for Electrician 1 credits
- TAEL275-Residential Wiring 2 credits
- TAEL276-Commercial Wiring 2 credits
- TAEL277-Industrial Wiring 2 credits
- TAEL280-Low Voltage & Comm 2 credits
- TAEL290-High Volt Power Distribution 2 credits

Additional Comments:

INDUSTRIAL ELECTRICIAN	
Related Program: Industrial Electrician	**Related Apprenticeship Program:**
Employer Code: F77	**Employer Name**: FMC - Rouge
RAPIDS:	**MARC:**
DOL Approved:	**Apprenticeship Code**:
CIP Code: 46.0302	**Minimum Total Credit Hours**: 46

Industrial Electrician - FMC Wayne Assembly Plant (F72)
Type
Completion Requirement

Mathematics

Credit Hours: 5

Complete ALL of the following Courses:
- TAMA110-Industrial Appl of Basic Math 2 credits
- TAMA120-Indust Appl of Algebraic Princ 3 credits

Electrical

Credit Hours: 41

Complete ALL of the following Courses:
- TAEL103-DC & AC Electricity 4 credits
- TAEL105-AC Theory & Equipment 4 credits
- TAEL106-Electronics Theory 4 credits
- TAEL145-DC and AC Motors 4 credits
- TAEL200-Ladder Diagrams & Control 4 credits
- TAEL245-Program Logic Controller 4 credits
- TAEL260-Automation Controls Robotics 4 credits
- TAEL265-National Electrical Code 2 credits
- TAEL273-Fire Alarm Sys for Electrician 1 credits
- TAEL275-Residential Wiring 2 credits
- TAEL276-Commercial Wiring 2 credits
- TAEL277-Industrial Wiring 2 credits
- TAEL280-Low Voltage & Comm 2 credits
- TAEL290-High Volt Power Distribution 2 credits

Additional Comments:

INDUSTRIAL ELECTRICIAN	
Related Program: Industrial Electrician	**Related Apprenticeship Program:**
Employer Code: F72	**Employer Name**: FMC - Wayne Assembly Plant
RAPIDS:	**MARC:**
DOL Approved:	**Apprenticeship Code**:
CIP Code: 46.0302	**Minimum Total Credit Hours**: 46

Industrial Electrician - FMC Woodhaven Forging (F76)
Type
Completion Requirement

Mathematics

Credit Hours: 5

Complete ALL of the following Courses:
- TAMA110-Industrial Appl of Basic Math 2 credits
- TAMA120-Indust Appl of Algebraic Princ 3 credits

Electrical

Credit Hours: 41

Complete ALL of the following Courses:
- TAEL103-DC & AC Electricity 4 credits
- TAEL105-AC Theory & Equipment 4 credits
- TAEL106-Electronics Theory 4 credits
- TAEL145-DC and AC Motors 4 credits
- TAEL200-Ladder Diagrams & Control 4 credits
- TAEL245-Program Logic Controller 4 credits
- TAEL260-Automation Controls Robotics 4 credits
- TAEL265-National Electrical Code 2 credits
- TAEL273-Fire Alarm Sys for Electrician 1 credits
- TAEL275-Residential Wiring 2 credits
- TAEL276-Commercial Wiring 2 credits
- TAEL277-Industrial Wiring 2 credits
- TAEL280-Low Voltage & Comm 2 credits
- TAEL290-High Volt Power Distribution 2 credits

Additional Comments:

INDUSTRIAL ELECTRICIAN	
Related Program: Industrial Electrician	**Related Apprenticeship Program:**
Employer Code: F76	**Employer Name**: FMC - Woodhaven Forging
RAPIDS:	**MARC:**
DOL Approved:	**Apprenticeship Code**:
CIP Code: 46.0302	**Minimum Total Credit Hours**: 46

Industrial Electrician - FMC Woodhaven Stamping (F70)
Type
Completion Requirement

Mathematics

Credit Hours: 5

Complete ALL of the following Courses:
- TAMA110-Industrial Appl of Basic Math 2 credits
- TAMA120-Indust Appl of Algebraic Princ 3 credits

Electrical

Credit Hours: 41

Complete ALL of the following Courses:
- TAEL103-DC & AC Electricity 4 credits
- TAEL105-AC Theory & Equipment 4 credits
- TAEL106-Electronics Theory 4 credits
- TAEL145-DC and AC Motors 4 credits
- TAEL200-Ladder Diagrams & Control 4 credits
- TAEL245-Program Logic Controller 4 credits
- TAEL260-Automation Controls Robotics 4 credits
- TAEL265-National Electrical Code 2 credits
- TAEL273-Fire Alarm Sys for Electrician 1 credits
- TAEL275-Residential Wiring 2 credits
- TAEL276-Commercial Wiring 2 credits
- TAEL277-Industrial Wiring 2 credits
- TAEL280-Low Voltage & Comm 2 credits
- TAEL290-High Volt Power Distribution 2 credits

Additional Comments:

INDUSTRIAL ELECTRICIAN	
Related Program: Industrial Electrician	**Related Apprenticeship Program:**
Employer Code: F70	**Employer Name**: FMC - Woodhaven Stamping
RAPIDS:	**MARC:**
DOL Approved:	**Apprenticeship Code**:
CIP Code: 46.0302	**Minimum Total Credit Hours**: 46

Industrial Electrician - Gerdau (G01)
Type
Completion Requirement

Mathematics

Credit Hours: 3

Complete ALL of the following Courses:
- TAMA120-Indust Appl of Algebraic Princ 3 credits

Electrical

Credit Hours: 34

Complete ALL of the following Courses:
- TAEL103-DC & AC Electricity 4 credits
- TAEL105-AC Theory & Equipment 4 credits
- TAEL106-Electronics Theory 4 credits
- TAEL145-DC and AC Motors 4 credits
- TAEL200-Ladder Diagrams & Control 4 credits
- TAEL245-Program Logic Controller 4 credits
- TAEL265-National Electrical Code 2 credits
- TAEL277-Industrial Wiring 2 credits
- TAEL280-Low Voltage & Comm 2 credits
- TAEL290-High Volt Power Distribution 2 credits
- TADV182-Special Topics Skilled Trades 2 credits

Foundations

Credit Hours: 2

Complete ALL of the following Courses:
- TAFD120-Industrial Safety Awareness 2 credits

Additional Comments:

INDUSTRIAL ELECTRICIAN	
Related Program: Industrial Electrician	**Related Apprenticeship Program:**
Employer Code: G01	**Employer Name**: Gerdau
RAPIDS:	**MARC:**
DOL Approved:	**Apprenticeship Code**:
CIP Code: 46.0302	**Minimum Total Credit Hours**: 41

Industrial Electrician - Plastic Omnium (P01)
Type
Completion Requirement

Mathematics

Credit Hours: 5

Complete ALL of the following Courses:
- TAMA110-Industrial Appl of Basic Math 2 credits
- TAMA120-Indust Appl of Algebraic Princ 3 credits

Foundations

Credit Hours: 6

Complete ALL of the following Courses:
- TAFD117-Industrial Computer Applicatio 3 credits

Electrical

Credit Hours: 35

Complete ALL of the following Courses:
- TAEL103-DC & AC Electricity 4 credits
- TAEL105-AC Theory & Equipment 4 credits
- TAEL145-DC and AC Motors 4 credits
- TAEL200-Ladder Diagrams & Control 4 credits
- TAEL245-Program Logic Controller 4 credits
- TAEL260-Automation Controls Robotics 4 credits
- TAEL265-National Electrical Code 2 credits
- TAEL273-Fire Alarm Sys for Electrician 1 credits
- TAEL275-Residential Wiring 2 credits
- TAEL276-Commercial Wiring 2 credits
- TAEL277-Industrial Wiring 2 credits
- TAEL280-Low Voltage & Comm 2 credits

Metallurgy

Credit Hours: 3

Complete ALL of the following Courses:

Welding

Credit Hours: 3

Complete ALL of the following Courses:

Fluid Power

Credit Hours: 8

Complete ALL of the following Courses:
- TAFP150-Intro to Industrial Hydraulics 4 credits
- TAFP160-Pneumatic Power & Control 4 credits

Print Reading

Credit Hours: 2

Complete ALL of the following Courses:
- TADV100-Basic Print Reading 2 credits

Maintenance

Credit Hours: 7

Complete ALL of the following Courses:
- TAMT115-Maintenan Trades Print Reading 3 credits
- TAMT126-Main Print Read: Plant Layout 2 credits
- TAMT210-Predict Maint-Vibration Analys 2 credits

Shop Techniques

Credit Hours: 4

Complete ALL of the following Courses:
- MTT100-Machine Tool Processes I 4 credits

Additional Comments:

INDUSTRIAL ELECTRICIAN	
Related Program: Industrial Electrician	**Related Apprenticeship Program:**
Employer Code: P01	**Employer Name**: Plastic Omnium
RAPIDS:	**MARC:**
DOL Approved:	**Apprenticeship Code**:
CIP Code: 46.0302	**Minimum Total Credit Hours**: 74

Industrial Electrician - Tower Automotive Diesel (T49)
Type
Completion Requirement

Mathematics

Credit Hours: 3

Complete ALL of the following Courses:
- TAMA120-Indust Appl of Algebraic Princ 3 credits

Electrical

Credit Hours: 35

Complete ALL of the following Courses:
- TAEL103-DC & AC Electricity 4 credits
- TAEL105-AC Theory & Equipment 4 credits
- TAEL145-DC and AC Motors 4 credits
- TAEL200-Ladder Diagrams & Control 4 credits
- TAEL245-Program Logic Controller 4 credits
- TAEL260-Automation Controls Robotics 4 credits
- TAEL265-National Electrical Code 2 credits
- TAEL273-Fire Alarm Sys for Electrician 1 credits
- TAEL275-Residential Wiring 2 credits
- TAEL276-Commercial Wiring 2 credits
- TAEL277-Industrial Wiring 2 credits
- TAEL280-Low Voltage & Comm 2 credits

Additional Comments:

INDUSTRIAL ELECTRICIAN	
Related Program: Industrial Electrician	**Related Apprenticeship Program:**
Employer Code: T49	**Employer Name**: Tower Automotive
RAPIDS:	**MARC:**
DOL Approved:	**Apprenticeship Code**:
CIP Code: 46.0302	**Minimum Total Credit Hours**: 41

INFOCYBRSCR.AAS - Computer Information Systems - Cybersecurity

Program Information

Program Title
Computer Information Systems Cybersecurity

Program Code
INFOCYBRSCR.AAS

Degree Type
Associate in Applied Science

Minimum Credits for Program Completion
63

Program Eligible for Financial Aid?
Yes

Subject
CyberSecurity (IA)

Semesters to Complete Program
5

Program Description
Prepares students for a career in the Cybersecurity field. As the world becomes more dependent on information technology, the security of information becomes critical. Henry Ford College is a member of the International Cyber Security Education Consortium, and offers an interdisciplinary program leading to an Associate in Applied Science degree that emphasizes technical security, ethical conduct, legal and regulatory compliance, law enforcement and development of strategic security plans. Students complete an interdisciplinary core of study and can tailor electives to their career or transfer interest.

In April, 2006, the Information Assurance Courseware Evaluation (IACE) Review Committee of the National Security Agency's National Information Assurance Education and Training Program (NIETP) certified that Henry Ford College's Information Assurance courseware meets all of the elements of the Committee on National Security Systems (CNSS) National Training Standard for Information Systems Security (INFOSEC) Professionals NSTISSI-4011.

Faculty Contact
Marrci Conner

Faculty Contact Email
mrconner2@hfcc.edu

Faculty Contact Phone
313-317-4021

Faculty Contact Office Location
E-162J

Academic Advisor
DeJanae Hayes

Academic Advisor Contact Email
dhayes8@hfcc.edu

Academic Advisor Contact Phone
313-845-9792

Academic Advisor Office Location
E-211C

School
Business, Entrepreneurship, PD

Academic Department
Computer Technology

Program Learning Outcomes

- Operate a personal computer and server operating system with productivity software installed on it, including Microsoft Office, file management, the Internet/Web, e-mail, and input/output/storage devices.
- Explain the importance of personal responsibility and security in a technological world, including copyright laws, netiquette, ethics, privacy issues, and security threats, vulnerabilities and countermeasures.
- Explain and utilize networking standards, protocols, transmission media, hardware, protocol analyzer and cybersecurity tools.
- Describe the fundamentals of cybersecurity, threats to business continuity, disaster recovery, legal, ethical predicaments and professional issues relative to security whether it be related to data, information, application, or networks.
- Develop a comprehensive security plan, including risk analysis, legal, regulatory, physical security, data and personnel threats.
- Explain and utilize digital forensic techniques, procedures and software tools.
- Describe the role of various disciplines within cybersecurity in the development of comprehensive security measures, guidelines, procedures, or plans.
- Design, create and manipulate with an enterprise database.
- Interface with the Unix/Linux operating system, including the vi editor, file management, and shell scripting.
- Demonstrate proficiency in national, Michigan and Wayne County policies, threats and vulnerabilities of systems, legal elements of protection and prosecution, countermeasures, risk management, trust, organizational personnel.

What Classes do I take?

2-Year Plan
Computer Information Systems: Cybersecurity - AAS: Recommended Sequence - Current
Total Credits
63 - 68
Description
Enrollment Status: Full Time

If you have questions about the order in which you should take these courses, or the availability of these courses, please contact your advisor or the faculty contact listed below.

Program Contact Information

Office Contact: School of Business, Entrepreneurship, and Professional Development: 313-845-9645, bepdinfo@hfcc.edu, Technology Bldg, Room: E-211

Faculty Contact: Marrci Conner: 313-317-4021, mrconner2@hfcc.edu, Technology Bldg, Room: E-162J

Academic Advisor: DeJanae Hayes: 313-845-9792, dhayes8@hfcc.edu, Technology E-211H Bldg, Room: E-211C

For students in an older version of this program, please visit Henry Ford College Catalog Archive to view required courses.

Year	Semester	Semester Credits
Year 1	Fall	14

Courses
- CIS100 - Introduction to Information Technology

Semester Credits 3
Contact Hours 47

Courses
- CIS125 - Principles of Programming Logic

Semester Credits 4
Contact Hours 62

Courses
- CNT110 - CCNA: Networking I

Semester Credits 4
Contact Hours 77

Courses
- CRJ131 - Intro Law Enforcement & Criminal Justice

Semester Credits 3
Contact Hours 47

Year	Semester	Semester Credits
Year 1	Winter	15

Courses
- CIS111 - SQL for Database Development

Semester Credits 3
Contact Hours 62

Courses
- CIS129 - Intro to UNIX With Shell Scripting

Semester Credits 4
Contact Hours 62

Courses
- CNT120 - CCNA: Networking II

Semester Credits 4
Contact Hours 77

Courses
- CNT260 - Network Security

Semester Credits 4
Contact Hours 62

Year	Semester	Semester Credits
Year 1	Summer	7

Courses
- CIS159 - A+ Technical Support

Semester Credits 4
Contact Hours 92

Courses
- ENG131 - Introduction to College Writing

Semester Credits 3
Contact Hours 47

Year	Semester	Semester Credits
Year 2	Fall	15

Courses
- CIS147 - Hybrid Cloud I

Semester Credits 4
Contact Hours 62

Courses
- CIS229 - UNIX System Administration

Semester Credits 4
Contact Hours 62

Courses
- CIS280 - Information Assurance and Security

Semester Credits 4
Contact Hours 62

Courses
- ENG132 - College Writing and Research
  OR
- ENG132H - Honors College Writing and Research
  OR
- ENG135 - Business & Technical Writing & Research

Semester Credits 3
Contact Hours 47

Year	Semester	Semester Credits
Year 2	Winter	12 - 17

Courses
- CIS276 - Digital Forensics

Semester Credits 3
Contact Hours 62

Courses
- CIS296 - Information Assurance Methodology

Semester Credits 3
Contact Hours 47

Courses
- AUTO237 - Comput Engine/Veh Netwrk, Prg, & Sec Sys
  OR
- ENGR130 - Introduction to Engineering

Semester Credits
2 - 3
Contact Hours
47 - 62

Courses
- CIS119 - Math for Computer Professional
  OR
- MATH115 - College Algebra
  OR
- MATH131 - Mathematics for the Modern World
  OR
- MATH141 - Introduction to Statistics
  OR
- MATH165 - Mathematics for Calculus
  OR
- MATH175 - Precalculus
  OR
- MATH180 - Calculus I
  OR
- MATH183 - Calculus II
  OR
- MATH275 - Discrete Mathematics
  OR
- MATH280 - Calculus III
  OR
- MATH283 - Linear Algebra
  OR
- MATH288 - Differential Equations

Semester Credits
3 - 6
Contact Hours
62 - 92

Courses
- Electives: The following courses are optional (Generic)
  OR
- CIS190 - Co-op in Computer Information Systems
  OR
- CIS290 - Co-op in Computer Information Systems

Semester Credits
1 - 2
Contact Hours
3 - 150

2-Year Plan
Computer Information Systems: Cybersecurity - AAS: Recommended Sequence 2022-2023
Total Credits
62 - 67
Description
Enrollment Status: Full Time

If you have questions about the order in which you should take these courses, or the availability of these courses, please contact your advisor or the faculty contact listed below.

Program Contact Information

Office Contact: School of Business, Entrepreneurship, and Professional Development: 313-845-9645, bepdinfo@hfcc.edu, Technology Bldg, Room: E-211

Faculty Contact: Marrci Conner: 313-317-4021, mrconner2@hfcc.edu, Technology Bldg, Room: E-162J

Academic Advisor: DeJanae Hayes: 313-845-9792, dhayes8@hfcc.edu, Technology E-211H Bldg, Room: E-211C

For students in an older version of this program, please visit Henry Ford College Catalog Archive to view required courses.

Year	Semester	Semester Credits
Year 1	Fall	14

Courses
- CIS100 - Introduction to Information Technology

Semester Credits
3
Contact Hours
47

Courses
- CIS125 - Principles of Programming Logic

Semester Credits
4
Contact Hours
62

Courses
- CNT110 - CCNA: Networking I

Semester Credits
4
Contact Hours
77

Courses
- CRJ131 - Intro Law Enforcement & Criminal Justice

Semester Credits
3
Contact Hours
47

Year	Semester	Semester Credits
Year 1	Winter	15

Courses
- CIS111 - SQL for Database Development

Semester Credits 3
Contact Hours 62

Courses
- CIS129 - Intro to UNIX With Shell Scripting

Semester Credits 4
Contact Hours 62

Courses
- CNT120 - CCNA: Networking II

Semester Credits 4
Contact Hours 77

Courses
- CNT260 - Network Security

Semester Credits 4
Contact Hours 62

Year	Semester	Semester Credits
Year 1	Summer	7

Courses
- CIS159 - A+ Technical Support

Semester Credits 4
Contact Hours 92

Courses
- ENG131 - Introduction to College Writing

Semester Credits 3
Contact Hours 47

Year	Semester	Semester Credits
Year 2	Fall	14

Courses
- CIS124 (Inactive Course) (Generic)

Semester Credits 3
Contact Hours 47

Courses
- CIS229 - UNIX System Administration

Semester Credits 4
Contact Hours 62

Courses
- CIS280 - Information Assurance and Security

Semester Credits 4
Contact Hours 62

Courses
- ENG132 - College Writing and Research
  OR
- ENG132H - Honors College Writing and Research
  OR
- ENG135 - Business & Technical Writing & Research

Semester Credits 3
Contact Hours 47

Year	Semester	Semester Credits
Year 2	Winter	12 - 17

Courses
- CIS276 - Digital Forensics

Semester Credits 3
Contact Hours 62

Courses
- CIS296 - Information Assurance Methodology

Semester Credits 3
Contact Hours 47

Courses
- AUTO237 - Comput Engine/Veh Netwrk, Prg, & Sec Sys
  OR
- ENGR130 - Introduction to Engineering

Semester Credits 2 - 3
Contact Hours 47 - 62

Courses

- CIS119 - Math for Computer Professional
  OR
- MATH115 - College Algebra
  OR
- MATH131 - Mathematics for the Modern World
  OR
- MATH141 - Introduction to Statistics
  OR
- MATH165 - Mathematics for Calculus
  OR
- MATH175 - Precalculus
  OR
- MATH180 - Calculus I
  OR
- MATH183 - Calculus II
  OR
- MATH275 - Discrete Mathematics
  OR
- MATH280 - Calculus III
  OR
- MATH283 - Linear Algebra
  OR
- MATH288 - Differential Equations

Semester Credits
3 - 6
Contact Hours
62 - 92

Courses

- Electives: The following courses are optional (Generic)
  OR
- CIS190 - Co-op in Computer Information Systems
  OR
- CIS290 - Co-op in Computer Information Systems

Semester Credits
1 - 2
Contact Hours
3 - 150

Program Requirements

Minimum Credits for Program Completion
63

Minimum GPA required for Graduation
2.000

HFC Credit Hour Residency Requirement
20

Simple Requisites

Core Course Requirements

Computer Information Systems Cybersecurity AAS - Core Course Requirements
Type
Completion Requirement

Complete ALL of the following Courses:

- CIS100-Intro Info Tech 3 credits
- CIS111-SQL for Database Development 3 credits
- CIS147-Hybrid Cloud I 4 credits
- CIS125-Prin of Programming Logic 4 credits
- CIS129-Intro to UNIX Shell Script 4 credits
- CIS159-A+ Technical Support 4 credits
- CIS229-UNIX System Administration 4 credits
- CIS276-Digital Forensics 3 credits
- CIS280-Info Assurance and Security 4 credits
- CIS296-Informat Assurance Methodology 3 credits
- CNT110-CCNA: Networking I 4 credits
- CNT120-CCNA: Networking II 4 credits
- CNT260-Network Security 4 credits

Support Course Requirements

Computer Information Systems Cybersecurity AAS - Support Course Requirements
Type
Completion Requirement

Cybersecurity

Complete at least 1 of the following courses:

- AUTO237-Comp Eng/Veh Ntwk, Prg, Sec Sy 2 credits
  OR ENGR130-Intro to Engineering 3 credits

Complete ALL of the following Courses:

- CRJ131-Intro Law Enf & Crim Just 3 credits
- ENG131-Introduction College Writing 3 credits

Category 2: English Composition or Communications

Complete at least 1 of the following courses:

- ENG132-College Writing and Research 3 credits
  OR ENG132H-Honors Coll Writing & Research 3 credits
  OR ENG135-Bus & Tech Writing & Research 3 credits

Category 3: Mathematics

Complete at least 1 of the following courses:

- CIS119-Math for Computer Professional 3 credits
  OR MATH115-College Algebra 5 credits
  OR MATH131-Math for the Modern World 4 credits
  OR MATH141-Introduction to Statistics 4 credits
  OR
  OR MATH165-Mathematics for Calculus 6 credits
  OR MATH175-Precalculus 5 credits
  OR MATH180-Calculus 1 5 credits
  OR MATH183-Calculus II 5 credits
  OR MATH275-Discrete Mathematics 4 credits
  OR MATH280-Calculus III 5 credits
  OR MATH283-Linear Algebra 3 credits
  OR MATH288-Differential Equations 5 credits

Electives: The following courses are optional

Complete ANY of the following Courses:

- CIS190-Co-op in CIS 1 credits
  OR CIS290-Co-op in CIS 2 credits

Additional Comments:
See General Education Requirements for Applied Degrees for details.

INSTRU.TA.CA - Instrumentation Technician

Program Information

Program Title
Instrumentation Technician

Program Code
INSTRU.TA.CA

Degree Type
Certificate of Achievement

Subject
Skilled Trade & Apprenticeship

Semesters to Complete Program
2

Program Description
Introduces instrumentation systems in a laboratory setting. Covers transducers including LVDTS, strain gages, accelerometers, load cells, magnetic pickups, and temperature detectors. Utilizes computer-based data acquisition including LabVIEW® graphical programming language.

Faculty Contact
Richard Cieslak

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Faculty Contact Phone
313-845-9645

Faculty Contact Office Location
E-164

Academic Advisor
Rachel VanZutphen

Academic Advisor Contact Email
rvanzutphen@hfcc.edu

Academic Advisor Contact Phone
313-845-9873

Academic Advisor Office Location
E-211L

School
Business, Entrepreneurship, PD

Academic Department
Skilled Trade & Apprenticeship

Admissions Requirements

Admissions Requirements
Additional Program Requirements

Complete a minimum of 38 additional credit hours in courses required within your specialization.

Program Learning Outcomes

Interpret technical drawings, schematics, and diagrams.

Perform assembly/disassembly, repair, troubleshooting, and calibration of components.

What Classes do I take?

2-Year Plan
See TAE Office for related RTI pathway
Total Credits
0

Program Requirements

Minimum Credits for Program Completion
2

Minimum GPA required for Graduation
2.000

HFC Credit Hour Residency Requirement
20

Simple Requisites

Core Course Requirements

Instrumentation Technician CA - Core Course Requirements
Type
Completion Requirement

Complete ALL of the following Courses:
- TAMA110-Industrial Appl of Basic Math 2 credits

Electrical: Complete courses based on specific company RTI

Enroll in the following Courses:
- ELEC103-Basic Electricity 4 credits
- ELEC106-Basic Electronics 3 credits
- ELEC255-Instrumentation Systems 3 credits

Technician Support: Complete courses based on specific company RTI

RTI (Related Training Instruction):

Employer specific document that details HFC courses needed to meet employer knowledge and skill requirements and fulfills HFC degree or certificate requirements.

Enroll in the following Courses:
- MTT100-Machine Tool Processes I 4 credits
- MTT130-Quality Cont Gaging & Inspecti 3 credits
- TAFD117-Industrial Computer Applicatio 3 credits
- TAFD120-Industrial Safety Awareness 2 credits
- TAGD110-Basic Shape & Size Interpret 3 credits
- TAMA120-Indust Appl of Algebraic Princ 3 credits
- TAMA130-Indust Appl Geometric Prin 2 credits
- TAPT120-Intro Process Instrumentation 3 credits
- TAPT125-Proces Tech Instrumentation II 4 credits

Instrumentation Technician - Great Lakes Water Authority (G02)
Type
Completion Requirement

Mathematics

Credit Hours: 2

Complete ALL of the following Courses:
- TAMA110-Industrial Appl of Basic Math 2 credits

Electrical

Credit Hours: 22

Complete ALL of the following Courses:
- TAEL106-Electronics Theory 4 credits
- ELEC103-Basic Electricity 4 credits
- ELEC245-Programmable Controllers 3 credits
  OR TAEL245-Program Logic Controller 4 credits
- ELEC115-Digital Circuits 1 3 credits
  OR TAEL115-Digital Theory 2 credits
- ELEC120-Basic Hydraulics 3 credits
- TAEL280-Low Voltage & Comm 2 credits
- ELEC200-Lad Diag & Mot Cntl 3 credits
  AND TAEL200-Ladder Diagrams & Control 4 credits

Process Instrumentation

Credit Hours: 7

Complete ALL of the following Courses:
- TAPI105-Intro Indust & Pneumatic Ctrls 3 credits

Additional Comments:

INSTRUMENTATION TECHNICIAN	
Related Program: Instrumentation Technician	**Related Apprenticeship Program:**
Employer Code: G02	**Employer Name**: Great Lakes Water Authority
RAPIDS:	**MARC:**
DOL Approved:	**Apprenticeship Code**:
CIP Code: 15.0404	**Minimum Total Credit Hours**: 31

ITHELPDESK.CA - IT Help Desk

Program Information

Program Title
IT Help Desk

Program Code
ITHELPDESK.CA

Degree Type
Certificate of Achievement

Minimum Credits for Program Completion
19

Program Eligible for Financial Aid?
Yes

Subject
Computer Information Systems

Semesters to Complete Program
2

Program Description
Provides students with the skills to necessary for an entry-level position as a IT Help Desk or Computer Support professional. All of the courses in this certificate can also be applied to required course courses in the Associate of Applied Science degree in Network Administration and Associate of Applied Science degree in Cybersecurity for students wishing to continue their education. This certificate also prepares students for multiple IT industry certifications.

Faculty Contact
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Faculty Contact Office Location
E-112

Academic Advisor
DeJanae Hayes

Academic Advisor Contact Email
dhayes8@hfcc.edu

Academic Advisor Contact Phone
313-845-9792

Academic Advisor Office Location
E-211H

School
Business, Entrepreneurship, PD

Academic Department
Computer Technology

Program Learning Outcomes

- Support and troubleshoot Microsoft Office applications.
- Install, configure and troubleshoot network devices.
- Install, configure and troubleshoot PC hardware.
- Install, configure and troubleshoot PC client operating systems.
- Install, configure and troubleshoot the Windows Server operating system.
- Identify and mitigate computer security threats.

What Classes do I take?

2-Year Plan
IT Help Desk Certificate of Achievement - CA: Recommended Sequence - Current
Total Credits
19
Description
Enrollment Status: Full Time

If you have questions about the order in which you should take these courses, or the availability of these courses, please contact your advisor or the faculty contact listed below.

Program Contact Information

Office Contact: School of Business, Entrepreneurship, and Professional Development: 313-845-9645, bepdinfo@hfcc.edu, Technology Bldg, Room: E-211

Faculty Contact: David Maier: 313-845-9890, djmaier@hfcc.edu, Technology Bldg, Room: E-112

Academic Advisor: DeJanae Hayes: 313-845-9792, dhayes8@hfcc.edu, Technology Bldg, Room: E-211C

For students in an older version of this program, please visit Henry Ford College Catalog Archive to view required courses.

Year	Semester	Semester Credits
Year 1	Fall	15

Courses
- CIS100 - Introduction to Information Technology

Semester Credits 3
Contact Hours 47

Courses
- CNT110 - CCNA: Networking I

Semester Credits 4
Contact Hours 77

Courses
- CNT120 - CCNA: Networking II

Semester Credits 4
Contact Hours 77

Courses
- CIS159 - A+ Technical Support

Semester Credits 4
Contact Hours 92

Year	Semester	Semester Credits
Year 1	Winter	4

Courses
- CIS147 - Hybrid Cloud I

Semester Credits 4
Contact Hours 62

2-Year Plan
IT Help Desk Certificate of Achievement - CA: Recommended Sequence 23-24
Total Credits
18
Description
Enrollment Status: Full Time

If you have questions about the order in which you should take these courses, or the availability of these courses, please contact your advisor or the faculty contact listed below.

Program Contact Information

Office Contact: School of Business, Entrepreneurship, and Professional Development: 313-845-9645, bepdinfo@hfcc.edu, Technology Bldg, Room: E-211

Faculty Contact: David Maier: 313-845-9890, djmaier@hfcc.edu, Technology Bldg, Room: E-112

Academic Advisor: DeJanae Hayes: 313-845-9792, dhayes8@hfcc.edu, Technology Bldg, Room: E-211C

For students in an older version of this program, please visit Henry Ford College Catalog Archive to view required courses.

Year	Semester	Semester Credits
Year 1	Fall	15

Courses
- CIS100 - Introduction to Information Technology

Semester Credits 3
Contact Hours 47

Courses
- CNT110 - CCNA: Networking I

Semester Credits 4
Contact Hours 77

Courses
- CNT120 - CCNA: Networking II

Semester Credits 4
Contact Hours 77

Courses
- CIS159 - A+ Technical Support

Semester Credits 4
Contact Hours 92

Year	Semester	Semester Credits
Year 1	Winter	3

Courses
- CIS124 (Inactive Course) (Generic)

Semester Credits 3
Contact Hours 62

Program Requirements

Minimum Credits for Program Completion
19

Minimum GPA required for Graduation
2.000

HFC Credit Hour Residency Requirement
20

Simple Requisites

Core Course Requirements

IT Help Desk CA - Core Course Requirements
Type
Completion Requirement

Complete ALL of the following Courses:
- CIS100-Intro Info Tech 3 credits
- CNT110-CCNA: Networking I 4 credits
- CNT120-CCNA: Networking II 4 credits
- CIS147-Hybrid Cloud I 4 credits
- CIS159-A+ Technical Support 4 credits

JOURNALISM.CA - Journalism

Program Information

Program Title
Journalism Certificate

Program Code
JOURNALISM.CA

Degree Type
Certificate of Achievement

Minimum Credits for Program Completion
23

Program Eligible for Financial Aid?
Yes

Subject
Journalism

Semesters to Complete Program
2

Program Description
Provides students with skills and knowledge in journalism, including news writing, feature writing, media writing, editing, layout, graphic design, business, marketing, print publishing, online publishing, video and audio production, and broadcast journalism. Students will have the opportunity to get hands on knowledge with newspaper production by contributing to and working on the campus newspaper in both print and online formats.

Faculty Contact	Faculty Contact Email	Faculty Contact Phone	Faculty Contact Office Location
Peter Kim	pkim@hfcc.edu	313-317-6682	N-204

Academic Advisor	Academic Advisor Contact Email	Academic Advisor Contact Phone	Academic Advisor Office Location
Sarah Krizan	smkrizan@hfcc.edu	313-845-9889	K-248

School
Liberal Arts

Academic Department
Media Communication Arts

Program Learning Outcomes

- Demonstrate professional standards in journalism.
- Assess ethical standards in journalism.
- Demonstrate standard journalism news writing skills, including researching, gathering, reporting, and editing.
- Demonstrate telecommunications media skills in news writing, audio and video editing, and broadcast journalism.
- Demonstrate creative problem-solving strategies in news production.
- Demonstrate multimedia approaches to news production.
- Collaborate with team members in the production of the campus newspaper in both print and online formats.
- Assess the role of advertising in news production.
- Demonstrate business, marketing, and design skills in the production of the campus newspaper.

What Classes do I take?

2-Year Plan
Journalism - CA: Recommended Sequence - Current
Total Credits
26
Description
Enrollment Status: Full Time

If you have questions about the order in which you should take these courses, or the availability of these courses, please contact your advisor or the faculty contact listed below.

Program Contact Information

Office Contact: School of Liberal Arts: 313-845-9624, lainfo@hfcc.edu, Liberal Arts Building, Room: K-201 and F-138

Faculty Contact: Peter Kim: 313-317-6682, pkim@hfcc.edu, Campus Safety, Room: N-204

Academic Advisor: Sarah Krizan: 313-845-9889, smkrizan@hfcc.edu, Liberal Arts Bldg, Room: K-248

For students in an older version of this program, please visit Henry Ford College Catalog Archive to view required courses.

Year	Semester	Semester Credits
Year 1	Fall	13

Courses
- JOUR131 - News Writing

Semester Credits
3
Contact Hours
47

Courses
- MCA131 - Intoduction to Media Communication

Semester Credits
3
Contact Hours
47

Courses
- ENG131 - Introduction to College Writing
  OR
- ENG131A - Introduction to College Writing (ALP)
  OR
- ENG131H - Honors Introduction to College Writing

Semester Credits 3
Contact Hours 47

Courses
- MCA151 - Digital Audio Editing
- **AND** MCA251 - Audio Production
  OR
- MCA157 - Digital Video Editing
- **AND** MCA257 - Video Production

Semester Credits 4
Contact Hours 63 - 78

Year	Semester	Semester Credits
Year 1	Winter	13

Courses
- MCA261 - Broadcast Journalism

Semester Credits 3
Contact Hours 47

Courses
- ENG132 - College Writing and Research
  OR
- ENG132H - Honors College Writing and Research
  OR
- ENG135 - Business & Technical Writing & Research

Semester Credits 3
Contact Hours 47

Courses
- ART123 - History of Modern Art
  OR
- ART135 - Art Appreciation
  OR
- ENG139 - Creative Writing
  OR
- ENG231 - Intro to Literature: Poetry and Drama
  OR
- ENG232 - Introduction to the Short Story
  OR
- ENG233 - Introduction to the Novel
  OR
- ENG234 - Topics in Literature
  OR
- ENG235 - American Literature Before 1900
  OR
- ENG236 - American Autobiography
  OR
- ENG237 - American Literature Since 1900
  OR
- ENG241 - Shakespeare
  OR
- ENG243 - Women's Literature
  OR
- ENG245 - The Bible as Literature
  OR
- ENG246 - Introduction to Children's Literature
  OR
- ENG248 - African American Literature
  OR
- HON151 - Honor Colloquium-History Culture Detroit
  OR
- HON161 - Honors Colloquium
  OR
- HON251 - Great Works
  OR
- MUS133 - Exploring Popular Music
  OR
- THEA131 - Theatre Appreciation

Semester Credits 3
Contact Hours 47

Courses
- BCO190 - Co-op in Business
  OR
- COMM190 - Co-op in Communications
  OR
- JOUR292 - Journalism Experience-Online News Writin
  OR
- SSCO190 - Co-op in Social Science
  OR
- MCA189 - Introduction to WHFR Radio

Semester Credits 1
Contact Hours 3 - 75

Courses
- ART123 - History of Modern Art
  OR
- ART135 - Art Appreciation
  OR
- ENG139 - Creative Writing
  OR
- ENG231 - Intro to Literature: Poetry and Drama
  OR
- ENG232 - Introduction to the Short Story
  OR
- ENG233 - Introduction to the Novel
  OR
- ENG234 - Topics in Literature
  OR
- ENG235 - American Literature Before 1900
  OR
- ENG236 - American Autobiography
  OR
- ENG237 - American Literature Since 1900
  OR
- ENG241 - Shakespeare
  OR
- ENG243 - Women's Literature
  OR
- ENG245 - The Bible as Literature
  OR
- ENG246 - Introduction to Children's Literature
  OR
- ENG248 - African American Literature
  OR
- HON151 - Honor Colloquium-History Culture Detroit
  OR
- HON161 - Honors Colloquium
  OR
- HON251 - Great Works
  OR
- MUS133 - Exploring Popular Music
  OR
- MCA132 - Film History and Criticism
  OR
- MCA241 - Media Writing
  OR
- THEA131 - Theatre Appreciation

Semester Credits
3
Contact Hours
47

2-Year Plan
Journalism - CA: Recommended Sequence 2022-2023
Total Credits
23
Description
Enrollment Status: Full Time

If you have questions about the order in which you should take these courses, or the availability of these courses, please contact your advisor or the faculty contact listed below.

Program Contact Information

Office Contact: School of Liberal Arts: 313-845-9624, lainfo@hfcc.edu, Liberal Arts Building, Room: K-201 and F-138

Faculty Contact: Peter Kim: 313-317-6682, pkim@hfcc.edu, Campus Safety, Room: N-204

Academic Advisor: Sarah Krizan: 313-845-9889, smkrizan@hfcc.edu, Liberal Arts Bldg, Room: K-248

For students in an older version of this program, please visit Henry Ford College Catalog Archive to view required courses.

Year	Semester	Semester Credits
Year 1	Fall	13

Courses
- JOUR131 - News Writing

Semester Credits
3
Contact Hours
47

Courses
- TCM131 - Introduction to Telecommunication

Semester Credits
3
Contact Hours
47

Courses
- ENG131 - Introduction to College Writing
  OR
- ENG131A - Introduction to College Writing (ALP)
  OR
- ENG131H - Honors Introduction to College Writing

Semester Credits
3
Contact Hours
47

Courses
- TCM151 - Digital Audio Editing
- **AND** TCM251 - Audio Production
  OR
- TCM157 - Digital Video Editing
- **AND** TCM257 - Video Production I

Semester Credits
4
Contact Hours
63 - 78

Year	Semester	Semester Credits
Year 1	Winter	10

Courses
- TCM261 - Broadcast Journalism

Semester Credits 3
Contact Hours 47

Courses
- ENG132 - College Writing and Research
  OR
- ENG132H - Honors College Writing and Research
  OR
- ENG135 - Business & Technical Writing & Research

Semester Credits 3
Contact Hours 47

Courses
- ART123 - History of Modern Art
  OR
- ART135 - Art Appreciation
  OR
- ENG139 - Creative Writing
  OR
- ENG231 - Intro to Literature: Poetry and Drama
  OR
- ENG232 - Introduction to the Short Story
  OR
- ENG233 - Introduction to the Novel
  OR
- ENG234 - Topics in Literature
  OR
- ENG235 - American Literature Before 1900
  OR
- ENG236 - American Autobiography
  OR
- ENG237 - American Literature Since 1900
  OR
- ENG241 - Shakespeare
  OR
- ENG243 - Women's Literature
  OR
- ENG245 - The Bible as Literature
  OR
- ENG246 - Introduction to Children's Literature
  OR
- ENG248 - African American Literature
  OR
- HON151 - Honor Colloquium-History Culture Detroit
  OR
- HON161 - Honors Colloquium
  OR
- HON251 - Great Works
  OR
- MUS133 - Exploring Popular Music
  OR
- TCM132 - Film History and Criticism
  OR
- TCM241 - Media Writing
  OR
- THEA131 - Theatre Appreciation

Semester Credits 3
Contact Hours 47

Courses
- BCO190 - Co-op in Business
  OR
- COMM190 - Co-op in Communications
  OR
- JOUR292 - Journalism Experience-Online News Writin
  OR
- SSCO190 - Co-op in Social Science
  OR
- TCM189 - WHFR Staff Training

Semester Credits 1
Contact Hours 3 - 75

Program Requirements

Minimum Credits for Program Completion
23
Minimum GPA required for Graduation
2.000
HFC Credit Hour Residency Requirement
20

Simple Requisites

Core Course Requirements

Journalism CA - Core Course Requirements
Type
Completion Requirement

Complete ALL of the following Courses:
- JOUR131-News Writing 3 credits
- MCA131-Intro to Media Communication 3 credits
- MCA261-Broadcast Journalism 3 credits

Category 1: English Composition

Complete at least 1 of the following courses:
- ENG131-Introduction College Writing 3 credits
  OR ENG131A-Intro College Writing (ALP) 3 credits
  OR ENG131H-Honors Intro College Writing 3 credits

Category 2: English Composition or Communications

Complete at least 1 of the following courses:
- ENG132-College Writing and Research 3 credits
  OR ENG132H-Honors Coll Writing & Research 3 credits
  OR ENG135-Bus & Tech Writing & Research 3 credits

Journalism Audio/Video

Complete either the audio or video course options

Earn at least 4 credits from the following:

- MCA151-Digital Audio Editing 1 credits
  AND MCA251-Audio Production 3 credits
- MCA157-Digital Video Editing 1 credits
  AND MCA257-Video Production 3 credits

Support Course Requirements

Journalism CA - Support Course Requirements
Type
Completion Requirement

Journalism Support

Complete at least 1 of the following courses:

- ART123-History of Modern Art 3 credits
  OR ART135-Art Appreciation 3 credits
  OR ENG139-Creative Writing 3 credits
  OR ENG231-Intro to Literature 3 credits
  OR ENG232-Intro to the Short Story 3 credits
  OR ENG233-Intro to Novel 3 credits
  OR ENG234-Topics in Literature 3 credits
  OR ENG235-Amer Literature Before 1900 3 credits
  OR ENG236-American Autobiography 3 credits
  OR ENG237-American Literature Since 1900 3 credits
  OR ENG241-Shakespeare 3 credits
  OR ENG243-Women's Literature 3 credits
  OR ENG245-The Bible as Literature 3 credits
  OR ENG246-Intro to Children's Literature 3 credits
  OR ENG248-African American Literature 3 credits
  OR HON151-HonorColloquiumCultureDetroit 3 credits
  OR HON161-Honors Colloquium 3 credits
  OR HON251-Great Works 3 credits
  OR MUS133-Exploring Popular Music 3 credits
  OR MCA132-Film History and Criticism 3 credits
  OR MCA241-Media Writing 3 credits
  OR THEA131-Theatre Appreciation 3 credits

Journalism Work Experience

Complete at least 1 of the following courses:

- BCO190-Co-op in Business 1 credits
  OR COMM190-Co-op in Communications 1 credits
  OR JOUR292-Journalism Online News Writing 1 credits
  OR SSCO190-Co-op in Social Science 1 credits
  OR MCA189-Introduction to WHFR Radio 1 credits

KITBTHDSN.CA - Kitchen & Bath Design

Program Information

Program Title
Kitchen and Bath Design Certificate

Program Code
KITBTHDSN.CA

Degree Type
Certificate of Achievement

Minimum Credits for Program Completion
31

Program Eligible for Financial Aid?
Yes

Subject
Interior Design

Semesters to Complete Program
3

Program Description
Offers students an opportunity to express themselves creatively while developing the skills necessary to obtain employment in the kitchen and bath industry. To ensure the quality and success of this program, Interior Design faculty collaborated with the National Kitchen and Bath Association (NKBA), the governing agency accrediting kitchen and bath design programs at colleges and universities across the U.S. and Canada. This certificate program requires a 160-hour internship in the kitchen and bath industry.

Program Accreditation Information
The NKBA assists in the development of the kitchen and bath program curriculum to assure the course objectives and competencies meet industry standards. The HFC Kitchen and Bath Design certificate meets the rigorous curriculum standards of the NKBA and has been designated as an NKBA supported program. Becoming a supported program provides HFC and our students more than theoretical and pedagogical advice. Additional benefits from NKBA include:

- State-of-the-art industry-standard kitchen and bath design software
- Industry research and student scholarship opportunities. Many awards are substantial.
- Extensive professional development opportunities for faculty
- Annual grants toward funding NKBA student chapter activities
- Discounted student NKBA membership dues
- Assistance for students in obtaining internships in kitchen and bath design firms

Faculty Contact
Chad Richert

Faculty Contact Email
crichert@hfcc.edu

Faculty Contact Phone
313-317-1515

Faculty Contact Office Location
E-115C

Academic Advisor
Rachel Vanzutphen

Academic Advisor Contact Email
rvanzutphen@hfcc.edu

Academic Advisor Contact Phone
313-845-9873

Academic Advisor Office Location
E-211L

School
Business, Entrepreneurship, PD

Academic Department
Building Sciences

Program Learning Outcomes

Develop professional kitchen and bath design presentation skills and produce high quality sample boards.

Select appropriate interior materials and finishes for kitchens and baths through critical analysis of their properties and characteristics meeting user need and budget.

Demonstrate proficiency in manual and CAD drafting skills in the production of basic 2-D and 3-D schematic construction drawings using National Kitchen and Bath Graphic Presentation standards.

Demonstrate and apply knowledge of building codes and mechanical systems, including acoustical, electrical, lighting, plumbing and HVAC to residential and commercial kitchen and bath environments.

Illustrate the ability to design large-scale residential and commercial kitchen and bath projects including programming documents, schematic and construction drawings, perspective drawings and presentation boards conveying well-developed aesthetic and functional interior design. concepts.

Demonstrate knowledge and understanding of the professional practice of interior design as it relates to the kitchen and bath industry.

Synthesize the kitchen and bath design educational experience through the development of design solutions and apply critical thinking and highly developed design skills to a national kitchen and bath design competition.

Students employ all aspects of technical information and skills acquired in Kitchen and Bath studio courses to a practical, supervised work environment in the kitchen and bath industry.

What Classes do I take?

2-Year Plan
Kitchen & Bath Design - CA: Recommended Sequence - Current
Total Credits
31
Description
Enrollment Status: Full Time

If you have questions about the order in which you should take these courses, or the availability of these courses, please contact your advisor or the faculty contact listed below.

Program Contact Information

Office Contact: School of Business, Entrepreneurship, and Professional Development: 313-845-9645, bepdinfo@hfcc.edu, Technology Bldg, Room: E-211

Faculty Contact: Chad Richert: 313-317-1515, crichert@hfcc.edu, Technology Bldg, Room: E-115C

Academic Advisor: Rachel Vanzutphen: 313-845-9873, rvanzutphen@hfcc.edu, Technology Bldg, Room: E-211L

For students in an older version of this program, please visit Henry Ford College Catalog Archive to view required courses.

Year	Semester	Semester Credits

Year	Semester	
Year 1	Fall	10

Courses
- BLDA100 - Introduction to Autocad

Semester Credits
4
Contact Hours
77

Courses
- BLDI120 - Principles of Design

Semester Credits
3
Contact Hours
47

Courses
- BLDI130 - Design & User Needs

Semester Credits
3
Contact Hours
47

Year	Semester	Semester Credits
Year 1	Winter	11

Courses
- BLDI140 - Interior Design Materials & Components

Semester Credits
3
Contact Hours
47

Courses
- BLDA130 - Introduction to Revit

Semester Credits
4
Contact Hours
77

Courses
- BLDI200 - Bath Design Studio

Semester Credits
4
Contact Hours
77

Year	Semester	Semester Credits
Year 2	Fall	10

Courses
- BLDI150 - Lighting & Environmental Systems Interio

Semester Credits
3
Contact Hours
47

Courses
- BLDI220 - Kitchen Design Studio

Semester Credits
4
Contact Hours
77

Courses
- BLDI290 - Professional Practice Interior Designers

Semester Credits
3
Contact Hours
47

Program Requirements

Minimum Credits for Program Completion
33

Minimum GPA required for Graduation
2.000

HFC Credit Hour Residency Requirement
20

Simple Requisites

Core Course Requirements

Required Core Courses
Type
Completion Requirement

Complete ALL of the following Courses:
- BLDA100-Introduction to Autocad 4 credits
- BLDI120-Principles of Design 3 credits
- BLDI130-Design & User Needs 3 credits
- BLDI140-Interior Design Mat & Comp 3 credits
- BLDI200-Bath Design Studio 4 credits
- BLDI220-Kitchen Design Studio 4 credits
- BLDI150-Light & Environ Sys for Interi 3 credits
- BLDI290-Professional Practice for ID 3 credits
- BLDA130-Introduction to Revit 4 credits

LAWEF.AA - Criminal Justice - Law Enforcement

Program Information

Program Title
Criminal Justice - Law Enforcement AA Degree

Program Code
LAWEF.AA

Degree Type
Associate in Arts

Minimum Credits for Program Completion
60

Program Eligible for Financial Aid?
Yes

Subject
Criminal Justice

Semesters to Complete Program
4

Program Description
Emphasizes the preservation of peace, the prevention of crime, and the protection of life and property. Prepares students for entry into the public service fields of law enforcement with a full working comprehension of the relationships between public and private concerns. Students completing the program benefit from articulation agreements with Eastern Michigan University, Madonna University, University of Michigan-Dearborn, and Lake Superior State University. This program allows successful students to continue their studies toward a bachelor degree in criminal justice with no loss of credit hours.

Faculty Contact
Jermaine Reese

Faculty Contact Email
jtreese@hfcc.edu

Faculty Contact Phone
313-845-9859

Faculty Contact Office Location
K-247

Academic Advisor
Hannah Doederlein

Academic Advisor Contact Email
hrdoederlein@hfcc.edu

Academic Advisor Contact Phone
313-317-6868

Academic Advisor Office Location
G-203A

School
Liberal Arts

Academic Department
Social Science

Program Learning Outcomes

Develop a report which effectively analyses and communicates a given situation.

Apply case law, criminal procedure, and custodial law by analyzing fact patterns and situations.

Analyze critical issues in law enforcement (i.e., use of fatal force, racial profiling, minorities in law enforcement, police misconduct) and their impact on day to day operations of a police department.

Distinguish between Police Community Relations and Community Policing and how each impact Community Policing.

Characterize the importance of ethics and ethical decisions at all levels and processes within the criminal justice system.

What Classes do I take?

2-Year Plan
Criminal Justice: Law Enforcement - AA: Recommended Sequence - Current
Total Credits
60 - 67
Description
If you have questions about the order in which you should take these courses, or the availability of these courses, please contact your advisor or the faculty contact listed below.

Program Contact Information

Office Contact: School of Liberal Arts: 313-845-9624, lainfo@hfcc.edu, Liberal Arts Building, Room: K-201 and F-138

Faculty Contact: Jermaine Reese: 313-845-9859, jtreese@hfcc.edu, Liberal Arts Building, Room: K-247

Academic Advisor: Hannah Doederlein: 313-317-6868, hrdoederlein@hfcc.edu, Health Careers Bldg, Room: G-203A

For students in an older version of this program, please visit Henry Ford College Catalog Archive to view required courses.

Year	Semester	Semester Credits
Year 1	Fall	15

Courses
- CRJ131 - Intro Law Enforcement & Criminal Justice

Semester Credits 3
Contact Hours 47

Courses
- ENG131 - Introduction to College Writing

Semester Credits 3
Contact Hours 47

Courses
- SPC131 - Intro to Public Speaking

Semester Credits 3
Contact Hours 47

Courses
- WR131 - Religious Traditions in the World

Semester Credits 3
Contact Hours 47

Courses
- CAT5 - Gen Ed Transfer - 2025

Semester Credits 3
Contact Hours 47

Year	Semester	Semester Credits
Year 1	Winter	15 - 17

Courses
- CRJ132 - Police Admin - Staff and Line Operations

Semester Credits
3
Contact Hours
47

Courses
- CRJ134 - Criminal Investigation

Semester Credits
3
Contact Hours
47

Courses
- ENG132 - College Writing and Research

Semester Credits
3
Contact Hours
47

Courses
- PSY131 - Introductory Psychology

Semester Credits
3
Contact Hours
47

Courses
- CAT6 - Transfer - Lec and Lab - 2025
  OR
- CAT6 - Transfer - Lec Only - 2020
  OR
- CAT6 - Gen Ed Transfer - Lab Only - 2020

Semester Credits
3 - 5
Contact Hours
47 - 107

Year	Semester	Semester Credits
Year 2	Fall	15 - 18

Courses
- CRJ251 - Criminal Law

Semester Credits
4
Contact Hours
62

Courses
- CIS100 - Introduction to Information Technology

Semester Credits
3
Contact Hours
47

Courses
- CAT6 - Transfer - Lec and Lab - 2025
  OR
- CAT6 - Transfer - Lec Only - 2020
  OR
- CAT6 - Gen Ed Transfer - Lab Only - 2020

Semester Credits
4 - 5
Contact Hours
62 - 107

Courses
- CAT3 - Coll Algebra - Gen Ed Transfer - 2020
  OR
- CAT3 - Quant Lit - Gen Ed Transfer - 2025
  OR
- CAT3 Stats - Gen Ed Transfer - 2025

Semester Credits
4 - 6
Contact Hours
62 - 94

Year	Semester	Semester Credits
Year 2	Winter	15 - 17

Courses
- CRJ252 - Criminal Procedure

Semester Credits
4
Contact Hours
62

Courses
- CRJ285 - Topics in Criminal Justice/Law Enfor

Semester Credits
3
Contact Hours
47

Courses
- Criminal Justice Support: Complete two (Generic)
  OR
- CRJ140 - Identity Theft: Prevention and Awareness
  OR
- CRJ126 - Introduction to Homeland Security
  OR
- CRJ135 - Juvenile Justice
  OR
- CRJ136 - Introduction to Corrections
  OR
- CRJ234 - Criminalistics: Criminal Investigation
  OR
- CRJ291 - Criminal Justice Internship 1

Semester Credits 6
Contact Hours 3 - 140

Courses
- Wellness - 2020

Semester Credits 2 - 4
Contact Hours 32 - 62

Program Requirements

Minimum Credits for Program Completion
60
Minimum GPA required for Graduation
2.000
HFC Credit Hour Residency Requirement
20

Simple Requisites

Core Course Requirements

Criminal Justice - Law Enforcement AA - Core Course Requirements
Type
Completion Requirement

Complete ALL of the following Courses:
- CRJ131-Intro Law Enf & Crim Just 3 credits
- CRJ132-Police Admin/Staff 3 credits
- CRJ134-Criminal Investigation 3 credits
- CRJ251-Criminal Law 4 credits
- CRJ252-Criminal Procedure 4 credits
- CRJ285-Topics Criminal Justice 3 credits

Support Course Requirements

Criminal Justice - Law Enforcement AA - Support Course Requirements
Type
Completion Requirement

Complete ALL of the following Courses:
- ENG131-Introduction College Writing 3 credits
- ENG132-College Writing and Research 3 credits
- PSY131-Introductory Psychology 3 credits
- SPC131-Introduction Public Speaking 3 credits
- WR131-Relig Traditions in the World 3 credits

Criminal Justice Support

Complete at least 2 of the following courses:
- CRJ140-Identity Theft:prevent & Aware 3 credits
- CRJ126-Intro to Homeland Security 3 credits
- CRJ135-Juvenile Justice 3 credits
- CRJ136-Introduction to Corrections 3 credits
- CRJ234-Criminalistics 3 credits
- CRJ291-Criminal Justice Internship 1 3 credits

General Education Requirements

Criminal Justice - Law Enforcement AA - General Education Requirements
Type
Completion Requirement

Category 3: Mathematics

Complete any one from the General Education Requirements for Transfer Degrees (MTA) list.

Complete at least 1 courses in the following course sets:
- CAT3 - Coll Algebra - Gen Ed Transfer - 2020
- CAT3 - Quant Lit - Gen Ed Transfer - 2025
- CAT3 Stats - Gen Ed Transfer - 2025

Category 5: Humanities and Fine Arts

Complete any one, from a different discipline (not WR) from the General Education Requirements for Transfer Degrees (MTA) list.

Complete at least 1 courses in the following course sets:
- CAT5 - Gen Ed Transfer - 2025

Category 6: Natural Sciences

Complete any two, including one with laboratory experience, from different disciplines from the General Education Requirements for Transfer Degrees (MTA) list.

Complete at least 2 courses in the following course sets:
- CAT6 - Transfer - Lec and Lab - 2025
- CAT6 - Transfer - Lec Only - 2020
- CAT6 - Gen Ed Transfer - Lab Only - 2020

Additional Comments:
See General Education Requirements for Transfer Degrees for details.

Degree Specific Requirements

Criminal Justice - Law Enforcement AA - Degree Specific Course Requirements
Type
Completion Requirement

Computer Technology

Complete at least 1 courses in the following course sets:
- Computer Technology - 2020

Wellness

Complete at least 1 courses in the following course sets:

- Wellness - 2020

Additional Comments:
See Degree Specific Requirements for details.

LAWEFPA.AA - Criminal Justice - Law Enforcement with Police Academy

Program Information

Program Title
Criminal Justice - Law Enforcement/Police Academy AA Degree

Program Code
LAWEFPA.AA

Degree Type
Associate in Arts

Minimum Credits for Program Completion
66

Program Eligible for Financial Aid?
Yes

Subject
Criminal Justice

Semesters to Complete Program
4

Program Description
Emphasizes the preservation of peace, the prevention of crime, and the protection of life and property. Prepares successful students for employment in law enforcement positions requiring both an Associate Degree and Michigan Commission on Law Enforcement Standards (MCOLES) certification. Students start this associate degree by first completing required course work at HFC, then transferring to Schoolcraft College to complete the Police Academy component of the program. Students then transfer back to HFC to receive their degree. Students completing the program benefit from articulation agreements with Eastern Michigan University, Madonna University, University of Michigan-Dearborn, and Lake Superior State University. This allows successful students to continue their studies toward a bachelor degree with no loss of credit hours.

Faculty Contact
Jermaine Reese

Faculty Contact Email
jtreese@hfcc.edu

Faculty Contact Phone
313-845-9859

Faculty Contact Office Location
K-247

Academic Advisor
Hannah Doederlein

Academic Advisor Contact Email
hrdoederlein@hfcc.edu

Academic Advisor Contact Phone
313-317-6868

Academic Advisor Office Location
G-203A

School
Liberal Arts

Academic Department
Social Science

Admissions Requirements

Admissions Requirements
Students must pass the following requirements prior to acceptance at the Police Academy at Schoolcraft College:

- Physical exam
- Written exam
- Criminal history background check
- Other background checks as required

Program Learning Outcomes

Develop a report which effectively analyses and communicates a given situation.

Apply case law, criminal procedure, and custodial law by analyzing fact patterns and situations.

Analyze critical issues in law enforcement (i.e., use of fatal force, racial profiling, minorities in law enforcement, police misconduct) and their impact on day to day operations of a police department.

Distinguish between police community relations and community policing and how each impact community policing.

Characterize the importance of ethics and ethical decisions at all levels and processes within the criminal justice system.

What Classes do I take?

2-Year Plan
Criminal Justice: Law Enforcement with Police Academy - AA: Recommended Sequence - Current
Total Credits
66
Description
If you have questions about the order in which you should take these courses, or the availability of these courses, please contact your advisor or the faculty contact listed below.

Program Contact Information

Office Contact: School of Liberal Arts; 313-845-9624, lainfo@hfcc.edu, Liberal Arts Building, Room: K-201 and F-138

Faculty Contact: Jermaine Reese: 313-845-9859, jtreese@hfcc.edu, Liberal Arts Building, Room: K-247

Academic Advisor: Hannah Doederlein: 313-317-6868, hrdoederlein@hfcc.edu, Health Careers Bldg, Room: G-203A

For students in an older version of this program, please visit Henry Ford College Catalog Archive to view required courses.

Year	Semester	Semester Credits
Year 1	Fall	15

Courses
- CRJ131 - Intro Law Enforcement & Criminal Justice

Semester Credits 3
Contact Hours 47

Courses
- ENG131 - Introduction to College Writing

Semester Credits 3
Contact Hours 47

Courses
- WR131 - Religious Traditions in the World

Semester Credits 3
Contact Hours 47

Courses
- CAT6 - Transfer - Lec and Lab - 2025
  OR
- CAT6 - Transfer - Lec Only - 2020
  OR
- CAT6 - Gen Ed Transfer - Lab Only - 2020

Semester Credits
3
Contact Hours
47

Courses
- CAT5 - Gen Ed Transfer - 2025

Semester Credits
3
Contact Hours
47

Year	Semester	Semester Credits
Year 1	Winter	15

Courses
- CRJ251 - Criminal Law

Semester Credits
4
Contact Hours
62

Courses
- ENG132 - College Writing and Research

Semester Credits
3
Contact Hours
47

Courses
- CAT6 - Transfer - Lec and Lab - 2025
  OR
- CAT6 - Transfer - Lec Only - 2020
  OR
- CAT6 - Gen Ed Transfer - Lab Only - 2020

Semester Credits
4
Contact Hours
62

Courses
- CAT3 - Coll Algebra - Gen Ed Transfer - 2020
  OR
- CAT3 - Quant Lit - Gen Ed Transfer - 2025
  OR
- CAT3 Stats - Gen Ed Transfer - 2025

Semester Credits
4
Contact Hours
62

Year	Semester	Semester Credits
Year 2	Fall	15

Courses
- PSY131 - Introductory Psychology

Semester Credits
3
Contact Hours
47

Courses
- SPC131 - Intro to Public Speaking

Semester Credits
3
Contact Hours
47

Courses
- CRJ285 - Topics in Criminal Justice/Law Enfor

Semester Credits
3
Contact Hours
47

Courses
- CIS100 - Introduction to Information Technology

Semester Credits
3
Contact Hours
47

Courses
- Criminal Justice Support: Complete one (Generic)
  OR
- CRJ126 - Introduction to Homeland Security
  OR
- CRJ140 - Identity Theft: Prevention and Awareness
  OR
- CRJ234 - Criminalistics: Criminal Investigation

Semester Credits
3
Contact Hours
47

Year	Semester	Semester Credits
Year 2	Winter	21

Courses
- CRJ287 - Police Academy

Semester Credits 21
Contact Hours 330

Program Requirements

Minimum Credits for Program Completion
66
Minimum GPA required for Graduation
2.000
HFC Credit Hour Residency Requirement
20

Simple Requisites

Core Course Requirements

Criminal Justice - Law Enforcement/Police Academy AA - Core Course Requirements
Type
Completion Requirement

Note: CRJ-287 at Schoolcraft College transfers back to HFC as CRJ287 Police Academyand fulfills the HFC Criminal Justice - Law Enforcement AA Degree course requirements for CRJ132 Police Admin/Staff, CRJ134 Criminal Investigation, CRJ135 Juvenile Justice, CRJ252 Criminal Procedure, and HPE142 - Missing course (HFC's Associate in Arts Wellness Degree Requirement for this program)

Complete ALL of the following Courses:
- CRJ131-Intro Law Enf & Crim Just 3 credits
- CRJ251-Criminal Law 4 credits
- CRJ285-Topics Criminal Justice 3 credits
- CRJ287-Police Academy 21 credits

Support Course Requirements

Criminal Justice - Law Enforcement/Police Academy AA - Support Course Requirements
Type
Completion Requirement

Complete ALL of the following Courses:
- CIS100-Intro Info Tech 3 credits
- ENG131-Introduction College Writing 3 credits
- ENG132-College Writing and Research 3 credits
- PSY131-Introductory Psychology 3 credits
- SPC131-Introduction Public Speaking 3 credits
- WR131-Relig Traditions in the World 3 credits

Criminal Justice Support

Complete at least 1 of the following courses:
- CRJ126-Intro to Homeland Security 3 credits
  OR CRJ140-Identity Theft:prevent & Aware 3 credits
  OR CRJ234-Criminalistics 3 credits
  OR

General Education Requirements

Criminal Justice - Law Enforcement/Police Academy AA - General Education Requirements
Type
Completion Requirement

Category 3: Mathematics

Complete any one from the General Education Requirements for Transfer Degrees (MTA) list.

Complete at least 1 courses in the following course sets:
- CAT3 - Coll Algebra - Gen Ed Transfer - 2020
- CAT3 - Quant Lit - Gen Ed Transfer - 2025
- CAT3 Stats - Gen Ed Transfer - 2025

Category 5: Humanities and Fine Arts

Complete any one, from a different discipline (not WR) from the General Education Requirements for Transfer Degrees (MTA) list.

Complete at least 1 courses in the following course sets:
- CAT5 - Gen Ed Transfer - 2025

Category 6: Natural Science

Complete any two, one with a lab, from different disciplines from the General Education Requirements for Transfer Degrees (MTA) list.

Complete at least 2 courses in the following course sets:
- CAT6 - Transfer - Lec and Lab - 2025
- CAT6 - Transfer - Lec Only - 2020
- CAT6 - Gen Ed Transfer - Lab Only - 2020

Additional Comments:
See General Education Requirements for Transfer Degrees for details.

MACREP.TA.CA - Machine Repair

Program Information

Program Title
Machine Repair

Program Code
MACREP.TA.CA

Degree Type
Certificate of Achievement

Subject
Skilled Trade & Apprenticeship

Semesters to Complete Program
2

Program Description
Provides students with the opportunity to lubricate machinery, change parts, or perform other routine machinery maintenance.

Faculty Contact
Richard Cieslak

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rfcieslak@hfcc.edu

Faculty Contact Phone
313-845-9645

Faculty Contact Office Location
E-164

Academic Advisor
Rachel VanZutphen

Academic Advisor Contact Email
rvanzutphen@hfcc.edu

Academic Advisor Contact Phone
313-845-9873

Academic Advisor Office Location
E-211L

School
Business, Entrepreneurship, PD

Academic Department
Skilled Trade & Apprenticeship

Admissions Requirements

Admissions Requirements
Additional Program Requirements

Complete a minimum of 38 additional credit hours in courses required within your specialization.

Program Learning Outcomes

Start machines and observe mechanical operation to determine efficiency and to detect problems.

Read work orders and specifications to determine machines and equipment requiring repair or maintenance.

Inspect or test damaged machine parts, and mark defective areas or advise supervisors of repair needs.

Reassemble machines after the completion of repair or maintenance work.

Dismantle machines and remove parts for repair, using hand tools, chain falls, jacks, cranes, or hoists.

What Classes do I take?

2-Year Plan
See TAE Office for related RTI
Total Credits
0

Program Requirements

Minimum Credits for Program Completion
13

Minimum GPA required for Graduation
2.000

HFC Credit Hour Residency Requirement
20

Simple Requisites

Core Course Requirements

Machine Repair CA - Core Course Requirements
Type
Completion Requirement

Complete ALL of the following Courses:
- TAMA110-Industrial Appl of Basic Math 2 credits
- TAMA120-Indust Appl of Algebraic Princ 3 credits
- TAMA130-Indust Appl Geometric Prin 2 credits
- TAMA200-Indust Appl Trigonomic Princip 3 credits
- TAFP280-Appl Electrohydraulics 3 credits

Craft Theory: Complete courses based on specific company RTI

Enroll in the following Courses:
- MTT100-Machine Tool Processes I 4 credits

Drafting: Complete courses based on specific company RTI

Enroll in the following Courses:
- TAGD110-Basic Shape & Size Interpret 3 credits
- TAGD120-Advanced Graphic Interpretatio 3 credits

Fluid Power: Complete courses based on specific company RTI

Enroll in the following Courses:
- TAFP150-Intro to Industrial Hydraulics 4 credits

Mechanical: Complete courses based on specific company RTI

Enroll in the following Courses:
- TAMT110-Mechanical Power Transmission 2 credits
- TAMT200-Predictive Maint Shaft Align 2 credits
- TAMT210-Predict Maint-Vibration Analys 2 credits
- TAMT220-Advanced Rigging 2 credits

Metallurgy: Complete courses based on specific company RTI

Enroll in the following Courses:

Welding-Elective and Optional Courses: Complete courses based on specific company RTI

Enroll in the following Courses:

Electives: Complete courses based on specific company RTI

Enroll in the following Courses:
- MTT105-Print Rdg for Manufacturing 3 credits
- MTT140-Introduction to CNC 3 credits
- MTT145-CNC Operations 4 credits
- PLMB101-Fund of Plumbing & Pipefitting 3 credits
- TAEL103-DC & AC Electricity 4 credits
- TAFD120-Industrial Safety Awareness 2 credits
- TAFD150-Applied Technology 3 credits
- TAFP160-Pneumatic Power & Control 4 credits
- TAGD130-Assembly Detailing 2 credits
- TAGD150-Tool, Jig, and Fixture Design 2 credits

Machine Repair - Diamler Chrysler (C98)
Type
Completion Requirement

Mathematics

Credit Hours: 10

Complete ALL of the following Courses:
- TAMA110-Industrial Appl of Basic Math 2 credits
- TAMA120-Indust Appl of Algebraic Princ 3 credits
- TAMA130-Indust Appl Geometric Prin 2 credits
- TAMA200-Indust Appl Trigonomic Princip 3 credits

Drafting

Credit Hours: 10

Complete ALL of the following Courses:
- TAGD110-Basic Shape & Size Interpret 3 credits
- TAGD120-Advanced Graphic Interpretatio 3 credits

Additional Comments:

MACHINE REPAIR	
Related Program: Machine Repair	**Related Apprenticeship Program:**
Employer Code: C98	**Employer Name**: Diamler Chrysler
RAPIDS:	**MARC:**
DOL Approved:	**Apprenticeship Code**:
CIP Code: 47.0399	**Minimum Total Credit Hours**: 52

Machine Repair - AAI Services Flat Rock (F54)
Type
Completion Requirement

Mathematics

Credit Hours: 10

Complete ALL of the following Courses:
- TAMA110-Industrial Appl of Basic Math 2 credits
- TAMA120-Indust Appl of Algebraic Princ 3 credits
- TAMA130-Indust Appl Geometric Prin 2 credits
- TAMA200-Indust Appl Trigonomic Princip 3 credits

Drafting

Credit Hours: 10

Complete ALL of the following Courses:
- TAGD110-Basic Shape & Size Interpret 3 credits
- TAGD120-Advanced Graphic Interpretatio 3 credits
- TAGD130-Assembly Detailing 2 credits
- TAGD150-Tool, Jig, and Fixture Design 2 credits

Additional Comments:

MACHINE REPAIR	
Related Program: Machine Repair	**Related Apprenticeship Program:**
Employer Code: F54	**Employer Name**: AAI Services Flat Rock
RAPIDS:	**MARC:**
DOL Approved:	**Apprenticeship Code**:
CIP Code: 47.0399	**Minimum Total Credit Hours**: 52

Machine Repair - Livonia Transmission (F53)
Type
Completion Requirement

Mathematics

Credit Hours: 10

Complete ALL of the following Courses:
- TAMA110-Industrial Appl of Basic Math 2 credits
- TAMA120-Indust Appl of Algebraic Princ 3 credits
- TAMA130-Indust Appl Geometric Prin 2 credits
- TAMA200-Indust Appl Trigonomic Princip 3 credits

Drafting

Credit Hours: 10

Complete ALL of the following Courses:
- TAGD110-Basic Shape & Size Interpret 3 credits
- TAGD120-Advanced Graphic Interpretatio 3 credits
- TAGD130-Assembly Detailing 2 credits
- TAGD150-Tool, Jig, and Fixture Design 2 credits

Additional Comments:

MACHINE REPAIR	
Related Program: Machine Repair	**Related Apprenticeship Program:**
Employer Code: F53	**Employer Name**: Livonia Transmission
RAPIDS:	**MARC:**
DOL Approved:	**Apprenticeship Code**:
CIP Code: 47.0399	**Minimum Total Credit Hours**: 52

Machine Repair - FMC - MAP Final & Paint (F71)
Type
Completion Requirement

Mathematics

Credit Hours: 10

Complete ALL of the following Courses:
- TAMA110-Industrial Appl of Basic Math 2 credits
- TAMA120-Indust Appl of Algebraic Princ 3 credits
- TAMA130-Indust Appl Geometric Prin 2 credits
- TAMA200-Indust Appl Trigonomic Princip 3 credits

Drafting

Credit Hours: 10

Complete ALL of the following Courses:
- TAGD110-Basic Shape & Size Interpret 3 credits
- TAGD120-Advanced Graphic Interpretatio 3 credits
- TAGD130-Assembly Detailing 2 credits
- TAGD150-Tool, Jig, and Fixture Design 2 credits

Metallurgy

Credit Hours: 2

Complete ALL of the following Courses:

Mechanical

Credit Hours: 8

Complete ALL of the following Courses:
- TAMT110-Mechanical Power Transmission 2 credits
- TAMT200-Predictive Maint Shaft Align 2 credits
- TAMT210-Predict Maint-Vibration Analys 2 credits
- TAMT220-Advanced Rigging 2 credits

Foundations

Credit Hours: 11

Complete ALL of the following Courses:
- MTT100-Machine Tool Processes I 4 credits
- TAFD150-Applied Technology 3 credits
- TAFP150-Intro to Industrial Hydraulics 4 credits

Additional Comments:

MACHINE REPAIR	
Related Program: Machine Repair	**Related Apprenticeship Program:**
Employer Code: F71	**Employer Name**: FMC - MAP Final & Paint
RAPIDS:	**MARC:**
DOL Approved:	**Apprenticeship Code**:
CIP Code: 47.0399	**Minimum Total Credit Hours**: 41

Machine Repair - FMC - Rawsonville (F50)
Type
Completion Requirement

Mathematics

Credit Hours: 10

Complete ALL of the following Courses:
- TAMA110-Industrial Appl of Basic Math 2 credits
- TAMA120-Indust Appl of Algebraic Princ 3 credits
- TAMA130-Indust Appl Geometric Prin 2 credits
- TAMA200-Indust Appl Trigonomic Princip 3 credits

Drafting

Credit Hours: 10

Complete ALL of the following Courses:
- TAGD110-Basic Shape & Size Interpret 3 credits
- TAGD120-Advanced Graphic Interpretatio 3 credits
- TAGD130-Assembly Detailing 2 credits
- TAGD150-Tool, Jig, and Fixture Design 2 credits

Metallurgy

Credit Hours: 2

Complete ALL of the following Courses:

Mechanical

Credit Hours: 8

Complete ALL of the following Courses:
- TAMT110-Mechanical Power Transmission 2 credits
- TAMT200-Predictive Maint Shaft Align 2 credits
- TAMT210-Predict Maint-Vibration Analys 2 credits
- TAMT220-Advanced Rigging 2 credits

Foundations

Credit Hours: 11

Complete ALL of the following Courses:
- MTT100-Machine Tool Processes I 4 credits
- TAFD150-Applied Technology 3 credits
- TAFP150-Intro to Industrial Hydraulics 4 credits

Additional Comments:

MACHINE REPAIR	
Related Program: Machine Repair	**Related Apprenticeship Program:**
Employer Code: F50	**Employer Name**: FMC - Rawsonville
RAPIDS:	**MARC:**
DOL Approved:	**Apprenticeship Code**:
CIP Code: 47.0399	**Minimum Total Credit Hours**: 41

Machine Repair - FMC - Research & Engineering (F73)
Type
Completion Requirement

Mathematics

Credit Hours: 10

Complete ALL of the following Courses:
- TAMA110-Industrial Appl of Basic Math 2 credits
- TAMA120-Indust Appl of Algebraic Princ 3 credits
- TAMA130-Indust Appl Geometric Prin 2 credits
- TAMA200-Indust Appl Trigonomic Princip 3 credits

Drafting

Credit Hours: 10

Complete ALL of the following Courses:
- TAGD110-Basic Shape & Size Interpret 3 credits
- TAGD120-Advanced Graphic Interpretatio 3 credits
- TAGD130-Assembly Detailing 2 credits
- TAGD150-Tool, Jig, and Fixture Design 2 credits

Metallurgy

Credit Hours: 2

Complete ALL of the following Courses:

Mechanical

Credit Hours: 8

Complete ALL of the following Courses:
- TAMT110-Mechanical Power Transmission 2 credits
- TAMT200-Predictive Maint Shaft Align 2 credits
- TAMT210-Predict Maint-Vibration Analys 2 credits
- TAMT220-Advanced Rigging 2 credits

Foundations

Credit Hours: 11

Complete ALL of the following Courses:
- MTT100-Machine Tool Processes I 4 credits
- TAFD150-Applied Technology 3 credits
- TAFP150-Intro to Industrial Hydraulics 4 credits

Additional Comments:

MACHINE REPAIR	
Related Program: Machine Repair	**Related Apprenticeship Program:**
Employer Code: F73	**Employer Name**: FMC - Research & Engineering
RAPIDS:	**MARC:**
DOL Approved:	**Apprenticeship Code**:
CIP Code: 47.0399	**Minimum Total Credit Hours**: 41

Machine Repair - FMC - Rouge (F77)
Type
Completion Requirement

Mathematics

Credit Hours: 10

Complete ALL of the following Courses:
- TAMA110-Industrial Appl of Basic Math 2 credits
- TAMA120-Indust Appl of Algebraic Princ 3 credits
- TAMA130-Indust Appl Geometric Prin 2 credits
- TAMA200-Indust Appl Trigonomic Princip 3 credits

Drafting

Credit Hours: 10

Complete ALL of the following Courses:
- TAGD110-Basic Shape & Size Interpret 3 credits
- TAGD120-Advanced Graphic Interpretatio 3 credits
- TAGD130-Assembly Detailing 2 credits
- TAGD150-Tool, Jig, and Fixture Design 2 credits

Metallurgy

Credit Hours: 2

Complete ALL of the following Courses:

Mechanical

Credit Hours: 8

Complete ALL of the following Courses:
- TAMT110-Mechanical Power Transmission 2 credits

- TAMT200-Predictive Maint Shaft Align 2 credits
- TAMT210-Predict Maint-Vibration Analys 2 credits
- TAMT220-Advanced Rigging 2 credits

Foundations

Credit Hours: 11

Complete ALL of the following Courses:

- MTT100-Machine Tool Processes I 4 credits
- TAGD150-Tool, Jig, and Fixture Design 2 credits
- TAFP150-Intro to Industrial Hydraulics 4 credits

Additional Comments:

MACHINE REPAIR	
Related Program: Machine Repair	**Related Apprenticeship Program:**
Employer Code: F77	**Employer Name**: FMC - Rouge
RAPIDS:	**MARC:**
DOL Approved:	**Apprenticeship Code**:
CIP Code: 47.0399	**Minimum Total Credit Hours**: 41

Machine Repair - FMC - Wayne Assembly Plant (F72)
Type
Completion Requirement

Mathematics

Credit Hours: 10

Complete ALL of the following Courses:

- TAMA110-Industrial Appl of Basic Math 2 credits
- TAMA120-Indust Appl of Algebraic Princ 3 credits
- TAMA130-Indust Appl Geometric Prin 2 credits
- TAMA200-Indust Appl Trigonomic Princip 3 credits

Drafting

Credit Hours: 10

Complete ALL of the following Courses:

- TAGD110-Basic Shape & Size Interpret 3 credits
- TAGD120-Advanced Graphic Interpretatio 3 credits
- TAGD130-Assembly Detailing 2 credits
- TAGD150-Tool, Jig, and Fixture Design 2 credits

Metallurgy

Credit Hours: 2

Complete ALL of the following Courses:

Mechanical

Credit Hours: 8

Complete ALL of the following Courses:

- TAMT110-Mechanical Power Transmission 2 credits
- TAMT200-Predictive Maint Shaft Align 2 credits
- TAMT210-Predict Maint-Vibration Analys 2 credits
- TAMT220-Advanced Rigging 2 credits

Foundations

Credit Hours: 11

Complete ALL of the following Courses:

- MTT100-Machine Tool Processes I 4 credits
- TAFD150-Applied Technology 3 credits
- TAFP150-Intro to Industrial Hydraulics 4 credits

Additional Comments:

MACHINE REPAIR	
Related Program: Machine Repair	**Related Apprenticeship Program:**
Employer Code: F72	**Employer Name**: FMC - Wayne Assembly Plant
RAPIDS:	**MARC:**
DOL Approved:	**Apprenticeship Code**:
CIP Code: 47.0399	**Minimum Total Credit Hours**: 41

Machine Repair - FMC - Woodhaven Forging (F76)
Type
Completion Requirement

Mathematics

Credit Hours: 10

Complete ALL of the following Courses:

- TAMA110-Industrial Appl of Basic Math 2 credits
- TAMA120-Indust Appl of Algebraic Princ 3 credits
- TAMA130-Indust Appl Geometric Prin 2 credits
- TAMA200-Indust Appl Trigonomic Princip 3 credits

Drafting

Credit Hours: 10

Complete ALL of the following Courses:

- TAGD110-Basic Shape & Size Interpret 3 credits
- TAGD120-Advanced Graphic Interpretatio 3 credits
- TAGD130-Assembly Detailing 2 credits
- TAGD150-Tool, Jig, and Fixture Design 2 credits

Metallurgy

Credit Hours: 2

Complete ALL of the following Courses:

Mechanical

Credit Hours: 8

Complete ALL of the following Courses:

- TAMT110-Mechanical Power Transmission 2 credits
- TAMT200-Predictive Maint Shaft Align 2 credits
- TAMT210-Predict Maint-Vibration Analys 2 credits
- TAMT220-Advanced Rigging 2 credits

Foundations

Credit Hours: 11

Complete ALL of the following Courses:

- MTT100-Machine Tool Processes I 4 credits
- TAFD150-Applied Technology 3 credits
- TAFP150-Intro to Industrial Hydraulics 4 credits

Additional Comments:

MACHINE REPAIR	
Related Program: Machine Repair	**Related Apprenticeship Program:**
Employer Code: F76	**Employer Name**: FMC - Woodhaven Forging
RAPIDS:	**MARC:**
DOL Approved:	**Apprenticeship Code**:
CIP Code: 47.0399	**Minimum Total Credit Hours**: 41

Machine Repair - FMC - Woodhaven Stamping (F70)
Type
Completion Requirement

Mathematics

Credit Hours: 10

Complete ALL of the following Courses:

- TAMA110-Industrial Appl of Basic Math 2 credits
- TAMA120-Indust Appl of Algebraic Princ 3 credits
- TAMA130-Indust Appl Geometric Prin 2 credits
- TAMA200-Indust Appl Trigonomic Princip 3 credits

Drafting

Credit Hours: 10

Complete ALL of the following Courses:

- TAGD110-Basic Shape & Size Interpret 3 credits
- TAGD120-Advanced Graphic Interpretatio 3 credits
- TAGD130-Assembly Detailing 2 credits
- TAGD150-Tool, Jig, and Fixture Design 2 credits

Metallurgy

Credit Hours: 2

Complete ALL of the following Courses:

Mechanical

Credit Hours: 8

Complete ALL of the following Courses:

- TAMT110-Mechanical Power Transmission 2 credits
- TAMT200-Predictive Maint Shaft Align 2 credits
- TAMT210-Predict Maint-Vibration Analys 2 credits
- TAMT220-Advanced Rigging 2 credits

Foundations

Credit Hours: 11

Complete ALL of the following Courses:

- MTT100-Machine Tool Processes I 4 credits
- TAGD150-Tool, Jig, and Fixture Design 2 credits
- TAFP150-Intro to Industrial Hydraulics 4 credits

Additional Comments:

MACHINE REPAIR	
Related Program: Machine Repair	**Related Apprenticeship Program:**
Employer Code: F70	**Employer Name**: FMC - Woodhaven Stamping
RAPIDS:	**MARC:**
DOL Approved:	**Apprenticeship Code**:
CIP Code: 47.0399	**Minimum Total Credit Hours**: 41

Machine Repair - Tower Automotive (T49)
Type
Completion Requirement

Mathematics

Credit Hours: 10

Complete ALL of the following Courses:

- TAMA110-Industrial Appl of Basic Math 2 credits
- TAMA120-Indust Appl of Algebraic Princ 3 credits
- TAMA130-Indust Appl Geometric Prin 2 credits
- TAMA200-Indust Appl Trigonomic Princip 3 credits

Drafting

Credit Hours: 10

Complete ALL of the following Courses:

- TAGD110-Basic Shape & Size Interpret 3 credits
- TAGD120-Advanced Graphic Interpretatio 3 credits
- TAGD130-Assembly Detailing 2 credits

- TAGD150-Tool, Jig, and Fixture Design 2 credits

Metallurgy

Credit Hours: 2

Complete ALL of the following Courses:

Mechanical

Credit Hours: 8

Complete ALL of the following Courses:

- TAMT110-Mechanical Power Transmission 2 credits
- TAMT200-Predictive Maint Shaft Align 2 credits
- TAMT210-Predict Maint-Vibration Analys 2 credits
- TAMT220-Advanced Rigging 2 credits

Foundations

Credit Hours: 11

Complete ALL of the following Courses:

- MTT100-Machine Tool Processes I 4 credits
- TAFD150-Applied Technology 3 credits
- TAFP150-Intro to Industrial Hydraulics 4 credits

Additional Comments:

MACHINE REPAIR	
Related Program: Machine Repair	**Related Apprenticeship Program:**
Employer Code: T49	**Employer Name**: Tower Automotive
RAPIDS:	**MARC:**
DOL Approved:	**Apprenticeship Code**:
CIP Code: 47.0399	**Minimum Total Credit Hours**: 41

MASST.CA - Medical Assistant

Program Information

Program Title
Medical Assistant Certificate

Program Code
MASST.CA

Degree Type
Certificate of Achievement

Minimum Credits for Program Completion
27

Program Eligible for Financial Aid?
Yes

Subject
Medical Office Assistant

Semesters to Complete Program
2

Program Description
A Level II (complex skills) certificate designed to prepare professional multi-skilled individuals for employment in physician's offices, medical clinics, laboratories and other ambulatory health care facilities. Emphasizes administrative and clinical skills in the classroom and laboratory under directed practical experience in physician offices, clinics, and ambulatory care settings, teen health centers, and in the public school system.

Externships are arranged by program faculty utilizing many of the clinical agencies throughout the region.

Program Accreditation Information
The Medical Assistant program is accredited by the Commission on Accreditation of Allied Health Education Programs upon the recommendation of the Medical Assistant Education Review Board (MAERB).

Commission on Accreditation of Allied Health Education Programs
9355-113th St N. #7709
Seminole, FL 33775
727-210-2350
www.caahep.org

Faculty Contact
Jennifer Paducha

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jlpaducha@hfcc.edu

Faculty Contact Phone
313-845-6466

Faculty Contact Office Location
G-133B

Academic Advisor
Samer Atris

Academic Advisor Contact Email
satris1@hfcc.edu

Academic Advisor Contact Phone
313-317-6862

Academic Advisor Office Location
G-203C

School
Health & Human Services

Academic Department
Health Careers, Education, and Human Services

Admissions Requirements

Admissions Requirements
Admission Requirements and Eligibility

- A minimum high school grade-point-average of C+ (2.5) or a minimum average score of 55 on the GED test, or a minimum college grade-point-average of C (2.25) for both transfer students and Henry Ford College students

The program is restricted and admits students based on space availability. Admission is on a first-come, first-served basis. Students must see the Health Careers advisor for admission to the program and are highly encouraged to complete their admission requirements as early as possible.

Additional Program Requirements

Accreditation standards require that students do not receive compensation/payment, monetary or otherwise, from any clinical site for any portion of their clinical externship (MOA190 Medical Office Externship).

The following courses must be taken within the same academic year in the following sequence:
Fall - MOA122 Intro Med Asst Clinical Proced
Winter- MOA152 Med Assist. Clinical Proc II
Winter/Summer - MOA190 Medical Office Externship

In order to begin the clinical procedures course of the Medical Assistant Certificate program, MOA152 Med Assist. Clinical Proc II, students must meet the following pre-requisites all with a B- or better:

MOA101 Admin Medical Procedures I
MOA122 Intro Med Asst Clinical Proced

And the following with a C or better:

MATH100 Basic Tech Mathematics or higher
BIO134 Essentials Anatomy&Physiology or BIO233 Anatomy and Physiology I and BIO234 Anatomy and Physiology II

During the program the students will be required to submit proof of all of the following by **designated program deadlines**:

- Active health insurance coverage
- Completion of physical examination
- Two-step tuberculosis PPD test (2-step TB test)
- Evidence of required immunizations and titers.
- American Heart Association, Basic Life Support for Healthcare Providers certification (AHA-BLS for Healthcare Providers card) valid throughout the Medical Assistant Certificate program (may be satisfied by AH105 Basic Life Support Healthcare).
- Valid driver's license or state issued identification card with a photo.
- Must pass the drug screen on the first test.
- Criminal background check.

Program Learning Outcomes

Perform entry level patient assessment and care in an ambulatory setting showing proficiency in patient safety, wellness and education based on scope of practice and national standards.
Demonstrate mathematical processes related to administering medication, mensuration of a patient using various methodologies, and reading clinical/laboratory equipment and graphs.
Demonstrate the ability to successfully perform clinical lab procedures, safety and emergency procedures along with patient preparation in the ambulatory and inpatient care setting.
Communicate effectively using verbal, non-verbal, and written communication as it relates to various health care providers and businesses.
Perform administrative duties based on scope of practice as it relates to finances, billing and insurance, and effective practice management.

What Classes do I take?

2-Year Plan
Medical Assistant - CA: Recommended Sequence - Current
Total Credits
27 - 30
Description
Enrollment Status: Full Time

If you have questions about the order in which you should take these courses, or the availability of these courses, please contact your advisor or the faculty contact listed below.

Program Contact Information

Office Contact: School of Health and Human Services: 313-845-9877, hhsinfo@hfcc.edu, Health Careers Education Ctr, Room: G-132

Faculty Contact: Jennifer Paducha: 313-845-6466, jlpaducha@hfcc.edu, Health Careers Education Ctr, Room: G-133B

Academic Advisor: Samer Atris: 313-317-6862, satris1@hfcc.edu, Health Careers Bldg, Room: G-203C

For students in an older version of this program, please visit Henry Ford College Catalog Archive to view required courses.

Year	Semester	Semester Credits
Year 1	Fall	14 - 17

Courses
- AH132 - Introduction to Healthcare Professions

Semester Credits
3
Contact Hours
62

Courses
- BIO134 - Essentials of Anatomy and Physiology
  OR
- BIO233 - Anatomy and Physiology I
- **AND** BIO234 - Anatomy and Physiology II

Semester Credits
5 - 8
Contact Hours
92 - 154

Courses
- MOA101 - Administrative Medical Procedures I

Semester Credits
4
Contact Hours
62

Courses
- MOA122 - Intro to Medical Assistant Clinical Proc

Semester Credits
2
Contact Hours
47

Year	Semester	Semester Credits
Year 1	Winter	13

Courses
- MOA152 - Medical Assistant Clinical Procedure II

Semester Credits
5
Contact Hours
107

Courses
- MOA190 - Medical Office Externship

Semester Credits
4
Contact Hours
173

Courses
- CAT3 - Gen Ed Applied - 2025

Semester Credits
4
Contact Hours
62

2-Year Plan
Medical Assistant - CA: Recommended Sequence 2022-2023
Total Credits
36 - 39
Description
Enrollment Status: Full Time

If you have questions about the order in which you should take these courses, or the availability of these courses, please contact your advisor or the faculty contact listed below.

Program Contact Information

Office Contact: School of Health and Human Services: 313-845-9877, hhsinfo@hfcc.edu, Health Careers Education Ctr, Room: G-132

Faculty Contact: Jennifer Paducha: 313-845-6466, jlpaducha@hfcc.edu, Health Careers Education Ctr, Room: G-133B

Academic Advisor: Samer Atris: 313-317-6862, satris1@hfcc.edu, Health Careers Bldg, Room: G-203C

For students in an older version of this program, please visit Henry Ford College Catalog Archive to view required courses.

Year	Semester	Semester Credits
Year 1	Summer	8

Courses
- AH100 - Medical Terminology

Semester Credits
4
Contact Hours
62

Courses
- CAT3 - Gen Ed Applied - 2025

Semester Credits 4
Contact Hours 62

Year	Semester	Semester Credits
Year 1	Fall	13 - 16

Courses
- MOA101 - Administrative Medical Procedures I

Semester Credits 4
Contact Hours 62

Courses
- MOA110 - Processing Health Insurance Claims

Semester Credits 2
Contact Hours 47

Courses
- MOA122 - Intro to Medical Assistant Clinical Proc

Semester Credits 2
Contact Hours 47

Courses
- BIO134 - Essentials of Anatomy and Physiology
  OR
- BIO233 - Anatomy and Physiology I
- **AND** BIO234 - Anatomy and Physiology II

Semester Credits 5 - 8
Contact Hours 92 - 154

Year	Semester	Semester Credits
Year 1	Winter	11

Courses
- MOA152 - Medical Assistant Clinical Procedure II

Semester Credits 5
Contact Hours 107

Courses
- MOA170 - Med Correspond - Electronic Hlth Record

Semester Credits 3
Contact Hours 62

Courses
- PSY131 - Introductory Psychology

Semester Credits 3
Contact Hours 47

Year	Semester	Semester Credits
Year 2	Summer	4

Courses
- MOA190 - Medical Office Externship

Semester Credits 4
Contact Hours 173

Program Requirements

Minimum Credits for Program Completion	Minimum GPA required for Graduation	HFC Credit Hour Residency Requirement
27	2.000	20

Simple Requisites

Core Course Requirements

Medical Assistant CA - Core Course Requirements
Type
Completion Requirement

Students must maintain a minimum B- grade or better in all MOA required core. All MOA courses taken at HFC must be successfully completed within three consecutive calendar years.

Accreditation standards require that students do not receive compensation/payment, monetary or otherwise, from any clinical site for any portion of their clinical practicum (MOA190 Medical Office Externship).

Complete ALL of the following Courses:
- MOA101-Admin Medical Procedures I 4 credits
- MOA122-Intro Med Asst Clinical Proced 2 credits
- MOA152-Med Assist. Clinical Proc II 5 credits
- MOA190-Medical Office Externship 4 credits
- AH132-Intro to Healthcare Profession 3 credits

Support Course Requirements

Medical Assistant CA - Support Course Requirements
Type
Completion Requirement

Category 3: Mathematics

Complete MATH100 Basic Tech Mathematics or higher

Earn at least 4 credits

Category 6: Natural Sciences - Biology

Complete BIO134 Essentials Anatomy&Physiology or BIO233 Anatomy and Physiology I and BIO234 Anatomy and Physiology II

Earn at least 5 credits from the following:
- BIO134-Essentials Anatomy&Physiology 5 credits
- BIO233-Anatomy and Physiology I 4 credits
  AND BIO234-Anatomy and Physiology II 4 credits

Additional Comments:
See General Education Requirements for Applied Degrees for details.

MECHATRONICSTECH.AAS - Mechatronics Technology

Program Information

Program Title
Mechatronics Technology

Program Code
MECHATRONICSTECH.AAS

Degree Type
Associate in Applied Science

Minimum Credits for Program Completion
60

Program Eligible for Financial Aid?
Yes

Subject
Skilled Trade & Apprenticeship

Semesters to Complete Program
7

Program Description
Develops skills essential to the fabrication, maintenance, and troubleshooting of industrial automated systems. Multiple disciplines are addressed, including industrial electrical, mechanical, robotics, and pneumatics. Course work and laboratory experiences will be provided that support skills in the area of self-directed work teams.

Faculty Contact
James Anderson

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Faculty Contact Phone
313-845-6351

Faculty Contact Office Location
E-164K

Academic Advisor
Rachel Vanzutphen

Academic Advisor Contact Email
rvanzutphen@hfcc.edu

Academic Advisor Contact Phone
313-845-9873

Academic Advisor Office Location
E-211L

School
Business, Entrepreneurship, PD

Academic Department
Skilled Trade & Apprenticeship

Admissions Requirements

Admissions Requirements
Admission Requirements and Eligibility

High school diploma or GED.

Program Learning Outcomes

Demonstrate an understanding of the mathematical functions specific to their trade.

Demonstrate an understanding of the occupational health and safety requirements relative to the workplace in general and specific to their trades.

Demonstrate an understanding of basic industrial computer applications in the general workplace and specific to their trades.

Demonstrate an understanding of the application an interpretation of engineering drawings relative to the general workplace and specific to their trades.

Demonstrate an understanding of job skills specific to their trades.

Demonstrate an understanding of the following essential knowledge and skills: troubleshooting, measurement, communication, use of hand tools, use of personal protection equipment, drawing interpretation, and problem solving.

What Classes do I take?

2-Year Plan
Mechatronics Technology - AAS: Recommended Sequence - Current
Total Credits
60
Description
Enrollment Status: Full Time

If you have questions about the order in which you should take these courses, or the availability of these courses, please contact your advisor or the faculty contact listed below.

Program Contact Information

Office Contact: School of Business, Entrepreneurship, and Professional Development: 313-845-9645, bepdinfo@hfcc.edu, Technology Bldg, Room: E-211

Faculty Contact: James Anderson: 313-845-6351, jwanderson3@hfcc.edu, Technology Bldg, Room: E-164K

Academic Advisor: Rachel Vanzutphen: 313-845-9873, rvanzutphen@hfcc.edu, Technology Bldg, Room: E-211L

For students in an older version of this program, please visit Henry Ford College Catalog Archive to view required courses.

Year	Semester	Semester Credits
Year 1	Fall	14

Courses
- TAEL103 - DC and AC Electricity

Semester Credits
4
Contact Hours
62

Courses
- TAMA120 - Industrial Applications Algebraic Princi

Semester Credits
3
Contact Hours
47

Courses
- TAFD117 - Industrial Computer Applications

Semester Credits 3
Contact Hours 77

Courses
- MTT100 - Machine Tool Processes I

Semester Credits 4
Contact Hours 92

Year	Semester	Semester Credits
Year 1	Winter	12

Courses
- TAEL106 - Electronics Theory

Semester Credits 4
Contact Hours 62

Courses
- TAFD120 - Industrial Safety Awareness

Semester Credits 2
Contact Hours 32

Courses
- TAFP160 - Pneumatic Power and Control

Semester Credits 4
Contact Hours 62

Courses
- TAMT110 - Mechanical Power Transmission

Semester Credits 2
Contact Hours 32

Year	Semester	Semester Credits
Year 1	Summer	11

Courses
- TAFD130 - Industrial Applications Physical Science

Semester Credits 3
Contact Hours 47

Courses
- TAMA130 - Industrial Appl of Geometric Principles

Semester Credits 2
Contact Hours 32

Courses
- TAEL200 - Ladder Diagrams & Motor Controls

Semester Credits 4
Contact Hours 62

Courses
- TADV100 - Basic Print Reading

Semester Credits 2
Contact Hours 32

Year	Semester	Semester Credits
Year 2	Fall	8

Courses
- TAEL245 - Programmable Logic Controllers (plc)

Semester Credits 4
Contact Hours 62

Courses
- TAMT200 - Predictive Maintenance Shaft Align & Cou

Semester Credits 2
Contact Hours 32

Courses
- TAMT220 - Advanced Rigging

Semester Credits 2
Contact Hours 32

Year	Semester	Semester Credits
Year 2	Winter	4

Courses
- TAEL260 - Automation Controls and Robotics

Semester Credits 4
Contact Hours 62

Year	Semester	Semester Credits
Year 2	Summer	6

Courses
- ENG131 - Introduction to College Writing

Semester Credits 3
Contact Hours 47

Courses
- POLS131 - Intro to American Gov't & Politi Science

OR
- SOC131 - Introduction to Sociology

Semester Credits 3
Contact Hours 47

Year	Semester	Semester Credits
Year 3	Fall	5

Courses
- TAEL235 - Siemens PLC/HMI Programming

Semester Credits
4
Contact Hours
62

Courses
- Trade and Apprentice Education: Complete 1 additional credits from: Trade & Apprentice courses: Development (TADV) Electrical (TAEL) Energy Technology (TAEN) Foundation (TAFD) Fluid Power (TAFP) Graphic Design (TAGD) Industrial Materials (TAIM) Mathematics (TAMA) Manufacturing (TAMN) Maintenance Technology (TAMT) Process Instrumentation (TAPI) Plumbing/Pipefitting (TAPP) Process Technology Practices (TAPT) Sheet Metal (TASM) Architecture / Construction (BLDG) Automotive (AUTO) Computer Aided Design / Drafting (DRAF) Electrical Engineering Technology (ELEC) Energy Techology (ENT) Machine Tool Technology (MTT) (Generic)

Semester Credits
1
Contact Hours
16

Program Requirements

Minimum Credits for Program Completion
60
Minimum GPA required for Graduation
2.000
HFC Credit Hour Residency Requirement
20

Simple Requisites

Core Course Requirements

Mechatronics Technology AAS - Core Course Requirements
Type
Completion Requirement

Complete ALL of the following Courses:
- ENG131-Introduction College Writing 3 credits
- TADV100-Basic Print Reading 2 credits
- TAEL103-DC & AC Electricity 4 credits
- TAEL106-Electronics Theory 4 credits
- TAEL200-Ladder Diagrams & Control 4 credits
- TAEL245-Program Logic Controller 4 credits
- TAEL235-Siemens PLC/HMI Programming 4 credits
- TAEL260-Automation Controls Robotics 4 credits
- TAFD117-Industrial Computer Applicatio 3 credits
- TAFD120-Industrial Safety Awareness 2 credits
- TAFD130-Indust App of Phys Science 3 credits
- TAFP160-Pneumatic Power & Control 4 credits
- TAMA120-Indust Appl of Algebraic Princ 3 credits
- TAMA130-Indust Appl Geometric Prin 2 credits
- TAMT110-Mechanical Power Transmission 2 credits
- TAMT200-Predictive Maint Shaft Align 2 credits
- TAMT220-Advanced Rigging 2 credits
- MTT100-Machine Tool Processes I 4 credits
- POLS131-Intro Amer Gov't & Pol Sci 3 credits
  OR SOC131-Introduction to Sociology 3 credits

Elective Hours

Complete at least one (1) additional credit from the following:

- Trade & Apprentice courses:
  - Development (TADV)
  - Electrical (TAEL)
  - Energy Technology (TAEN)
  - Foundation (TAFD)
  - Fluid Power (TAFP)
  - Graphic Design (TAGD)
  - Industrial Materials (TAIM)
  - Mathematics (TAMA)
  - Manufacturing (TAMN)
  - Maintenance Technology (TAMT)
  - Process Instrumentation (TAPI)
  - Plumbing/Pipefitting (TAPP)
  - Process Technology Practices (TAPT)
  - Sheet Metal (TASM)
- Architecture / Construction (BLDA)
- Automotive (AUTO)
- Computer Aided Design / Drafting (DRAF)
- Electrical Engineering Technology (ELEC)
- Energy Technology (ENT)
- Machine Tool Technology (MTT)

Earn at least 1 credits

MEDBILLCODEMGMT.AAS - Medical Billing and Coding Management

Program Information

Program Title
Medical Billing and Coding Management
Program Code
MEDBILLCODEMGMT.AAS
Degree Type
Associate in Applied Science
Minimum Credits for Program Completion
60
Program Eligible for Financial Aid?
Yes
Subject
Medical Office Assistant
Semesters to Complete Program
5
Program Description
Builds on the Medical Billing and Coding certificate and prepares students to manage the specialized business functions of a medical practice or medical facility. Course work covers medical billing, coding, and insurance claim forms as well as baseic operations of a medical facility including customer service, management, and effective oral and written communications.
Program Accreditation Information
Program Completion Limits

HFC continuously attempts to improve each program, and as a result courses and requirements may be modified. Curriculum, course content, and admission criteria are subject to change by action of the College faculty and administration.

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Academic Advisor Contact Phone
313-317-6862
Academic Advisor Office Location
G-203C
School
Health & Human Services
Academic Department
Health Careers, Education, and Human Services

Program Learning Outcomes

Demonstrate the process of producing procedural and diagnostic claims for the major insurance carriers.

Demonstrate the correct process of insurance procedures in the areas of physician and facility billing.

Communicate effectively with clients, providers, and insurance agencies.

Apply management theory to effectively supervise the human resources of an organization.

Solve common problems in managing the business operations of a medical or medical related organization.

What Classes do I take?

2-Year Plan
Medical Billing and Coding Management - AAS: Recommended Sequence - Current
Total Credits
61 - 63
Description
If you have questions about the order in which you should take these courses, or the availability of these courses, please contact your advisor or the faculty contact listed below.

Program Contact Information

Office Contact: School of Health and Human Services: 313-845-9877, hhsinfo@hfcc.edu, Health Careers Education Ctr, Room: G-132

Faculty Contact: Jennifer Paducha: 313-845-6466, jlpaducha@hfcc.edu, Health Careers Education Ctr, Room: G-133B

Academic Advisor: Samer Atris: 313-317-6862, satris1@hfcc.edu, Health Careers Bldg, Room: G-203C

For students in an older version of this program, please visit Henry Ford College Catalog Archive to view required courses.

Year	Semester	Semester Credits
Year 1	Fall	12

Courses
- AH100 - Medical Terminology

Semester Credits 4
Contact Hours 62

Courses
- HIT151 - Basic Medical Coding: Theory & Practice

Semester Credits 4
Contact Hours 62

Courses
- MOA165 - Physician Billing Concepts

Semester Credits 4
Contact Hours 62

Year	Semester	Semester Credits
Year 1	Winter	13

Courses
- HIT230 - Ambulatory Coding

Semester Credits 3
Contact Hours 47

Courses
- MOA168 - Facility Billing Concepts

Semester Credits 4
Contact Hours 62

Courses
- MOA181 - Medical Collection and Legal Issues

Semester Credits
3
Contact Hours
47

Courses
- MOA205 - Insurance Coding & Reimbursement

Semester Credits
3
Contact Hours
47

Year	Semester	Semester Credits
Year 2	Fall	13 - 15

Courses
- ENG131 - Introduction to College Writing

Semester Credits
3
Contact Hours
47

Courses
- MATH100 - Basic Technical Mathematics
  OR
- MATH101 - Mathematics for Health Careers
  OR
- MATH103 - Technical Mathematics
  OR
- MATH110 - Intermediate Algebra
  OR
- MATH115 - College Algebra
  OR
- MATH131 - Mathematics for the Modern World
  OR
- MATH141 - Introduction to Statistics
  OR
- MATH165 - Mathematics for Calculus
  OR
- MATH175 - Precalculus
  OR
- MATH180 - Calculus I

Semester Credits
4 - 6
Contact Hours
62 - 92

Courses
- Social Science: Complete one Political Science (POLS), Psychology (PSY), or Sociology (SOC) course. (Generic)

Semester Credits
3
Contact Hours
47

Courses
- CIS100 - Introduction to Information Technology
  OR
- CIS221 - Instructional Tech Educators (Pre K-12)

Semester Credits
3
Contact Hours
47

Year	Semester	Semester Credits
Year 2	Winter	14

Courses
- BAC110 - Practical Accounting
  OR
- BAC131 - Introduction to Financial Accounting

Semester Credits
4
Contact Hours
62

Courses
- Social Science: Complete one Political Science (POLS), Psychology (PSY), or Sociology (SOC) course. (Generic)

Semester Credits
3
Contact Hours
47

Courses
- MGT230 - Principles of Management

Semester Credits
3
Contact Hours
47

Courses
- BBA131 - Introduction to Business

Semester Credits
4
Contact Hours
62

Year	Semester	Semester Credits
-	-	9

Courses
- Elective Hours (Generic)

Semester Credits	9
Contact Hours	144

Program Requirements

Minimum Credits for Program Completion	Minimum GPA required for Graduation	HFC Credit Hour Residency Requirement
60	2.000	20

Simple Requisites

Core Course Requirements

Medical Billing and Coding Management AAS - Core Course Requirements
Type
Completion Requirement

Complete ALL of the following Courses:
- HIT151-Basic Med Coding: Theory/Pract 4 credits
- HIT230-Ambulatory Coding 3 credits
- MOA165-Physician Billing Concepts 4 credits
- MOA168-Facility Billing Concepts 4 credits
- MOA181-Med Collection & Legal Issues 3 credits
- MOA205-Insurance Coding & Reimb 3 credits
- BBA131-Intro to Business 4 credits
- MGT230-Principles of Management 3 credits

Support Course Requirements

Medical Billing and Coding Management AAS - Support Course Requirements
Type
Completion Requirement

Complete ALL of the following Courses:
- AH100-Medical Terminology 4 credits
- ENG131-Introduction College Writing 3 credits

Category 2: English Composition or Communications

Complete at least 1 of the following courses:
- ENG132-College Writing and Research 3 credits
  OR ENG132H-Honors Coll Writing & Research 3 credits
  OR ENG135-Bus & Tech Writing & Research 3 credits

Category 3: Mathematics

Complete at least 1 of the following courses:
- MATH100-Basic Tech Mathematics 4 credits
  OR MATH101-Math for Health Career 4 credits
  OR MATH103-Technical Mathematics 4 credits
  OR MATH110-Intermediate Algebra 4 credits
  OR MATH115-College Algebra 5 credits
  OR MATH131-Math for the Modern World 4 credits
  OR MATH141-Introduction to Statistics 4 credits
  OR
  OR MATH165-Mathematics for Calculus 6 credits
  OR MATH175-Precalculus 5 credits
  OR MATH180-Calculus 1 5 credits

Computer Technology

Complete ALL of the following Courses:
- HCS131-Computers in Health Care 3 credits

Category 4: Social Science

Complete one Political Science (POLS), Psychology (PSY), or Sociology (SOC) course.

Earn at least 3 credits

Accounting

Complete at least 1 of the following courses:
- BAC110-Practical Accounting 4 credits
  OR BAC131-Intro to Financial Accounting 4 credits

Electives

Recommended Electives: AH132 Intro to Healthcare Profession and BIO134 Essentials Anatomy&Physiology

Earn at least 9 credits

MEDBILLINGCODING.CA - Medical Billing and Coding

Program Information

Program Title
Medical Billing and Coding

Program Code
MEDBILLINGCODING.CA

Degree Type
Certificate of Achievement

Minimum Credits for Program Completion
25

Program Eligible for Financial Aid?
Yes

Subject
Medical Office Assistant

Semesters to Complete Program
2

Program Description
A certificate designed to provide entry-level skills for medical billing and medical coding specialists. The Program provides instruction necessary for reimbursement of health care services, including review of medical records, assigning diagnostic and procedural codes, verification of insurance, claim preparation, and posting and balancing of accounts. Students will be able to recognize, evaluate, and interpret inconsistencies, discrepancies, and inaccuracies in the billing and coding processes. Physician billing as well as facility billing procedures are developed.

Program Accreditation Information
Upon completion of the Medical Insurance Specialist program students are eligible to take the certification examination for Certified Medical Administrative Specialists (CMAS). Students may also consider taking the Certified Medical Billing Insurance Examination (CMBI) offered by the American Association of Professional Coders. These credentials may be necessary for employment in administrative medical office duties.

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Faculty Contact Phone
313-845-6466

Faculty Contact Office Location
G-133B

Academic Advisor
Samer Atris

Academic Advisor Contact Email
satris1@hfcc.edu

Academic Advisor Contact Phone
313-317-6862

Academic Advisor Office Location
G-203C

School
Health & Human Services

Academic Department
Health Careers, Education, and Human Services

Admissions Requirements

Admissions Requirements
Additional Program Requirements

Adherence to the program requirements outlined in the Student Handbook.
Achievement of a minimum grade of C or better in all required core and required support courses.

Program Learning Outcomes

Demonstrate the process of producing procedural and diagnostic claims for the major insurance carriers.

Demonstrate the correct process of insurance procedures in the areas of physician and facility billing.

Communicate effectively with clients, providers, and insurance agencies.

What Classes do I take?

2-Year Plan
Medical Billing and Coding - CA: Recommended Sequence - Current
Total Credits
25
Description
Enrollment Status: Full Time

If you have questions about the order in which you should take these courses, or the availability of these courses, please contact your advisor or the faculty contact listed below.

Program Contact Information

Office Contact: School of Health and Human Services: 313-845-9877, hhsinfo@hfcc.edu, Health Careers Education Ctr, Room: G-132

Faculty Contact: Jennifer Paducha: 313-845-6466, jlpaducha@hfcc.edu, Health Careers Education Ctr, Room: G-133B

Academic Advisor: Samer Atris: 313-317-6862, satris1@hfcc.edu, Health Careers Bldg, Room: G-203C

For students in an older version of this program, please visit Henry Ford College Catalog Archive to view required courses.

Year	Semester	Semester Credits
Year 1	Fall	12

Courses
- AH100 - Medical Terminology

Semester Credits
4
Contact Hours
62

Courses
- HIT151 - Basic Medical Coding: Theory & Practice

Semester Credits
4
Contact Hours
62

Courses
- MOA165 - Physician Billing Concepts

Semester Credits
4
Contact Hours
62

Year	Semester	Semester Credits
Year 1	Winter	13

Courses
- HIT230 - Ambulatory Coding

Semester Credits 3
Contact Hours 47

Courses
- MOA168 - Facility Billing Concepts

Semester Credits 4
Contact Hours 62

Courses
- MOA181 - Medical Collection and Legal Issues

Semester Credits 3
Contact Hours 47

Courses
- MOA205 - Insurance Coding & Reimbursement

Semester Credits 3
Contact Hours 47

Program Requirements

Minimum Credits for Program Completion
25

Minimum GPA required for Graduation
2.000

HFC Credit Hour Residency Requirement
20

Simple Requisites

Core Course Requirements

Medical Billing and Coding CA - Core Course Requirements
Type
Completion Requirement

Complete ALL of the following Courses:
- HIT151-Basic Med Coding: Theory/Pract 4 credits
- MOA165-Physician Billing Concepts 4 credits
- MOA168-Facility Billing Concepts 4 credits
- HIT230-Ambulatory Coding 3 credits
- MOA181-Med Collection & Legal Issues 3 credits
- MOA205-Insurance Coding & Reimb 3 credits

Support Course Requirements

Medical Billing and Coding CA - Support Course Requirements
Type
Completion Requirement

Complete ALL of the following Courses:
- AH100-Medical Terminology 4 credits

MEDIACOMM.AA - Media Communication Arts

Program Information

Program Title
Media Communication Arts

Program Code
MEDIACOMM.AA

Degree Type
Associate in Arts

Minimum Credits for Program Completion
60

Program Eligible for Financial Aid?
Yes

Subject
Media Communication Arts

Semesters to Complete Program
4

Program Description
Provides a comprehensive foundation of study and practice in the areas of media production, editing, writing, performance, and management for radio, television, film, broadcast journalism, public relations, media performance, and social media. This specialization is developed through a range of courses incorporating both theoretical classroom academic knowledge and creative hands-on use of hardware, software, studios, and labs combined with real-world assignments and experience to provide successful students with a solid foundation for pursuing a four-year related degree at a transfer institution or as a stepping stone into the field.

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Faculty Contact Phone
313-845-9842

Faculty Contact Office Location
F-146

Academic Advisor
Sarah Krizan

Academic Advisor Contact Email
smkrizan@hfcc.edu

Academic Advisor Contact Phone
313-845-9889

Academic Advisor Office Location
K-248

School
Liberal Arts

Academic Department
Media Communication Arts

Admissions Requirements

Admissions Requirements
Additional Program Requirements

The purchase of minimal support materials including headphones, binders, a flash drive, and additional items will be required for program project needs. Individual instructors will provide specific materials lists.

Program Learning Outcomes

Assess issues relating to media literacy and ethics using practices of media criticism.

Demonstrate media-related skills including media writing, script analysis, audio and video performance, and criticism.

Implement the use of industry-standard software and hardware to produce and edit audio and video works.

Examine historical and contemporary issues as they apply to the legal aspects of the media industry.

Solve problems by collaborating with team members on a media project in an ensemble writing, production, performance, editing or directing environment.

What Classes do I take?

2-Year Plan
Media Communication Arts - AA: Recommended Sequence - Current
Total Credits
60 - 61
Description
Enrollment Status: Full Time

If you have questions about the order in which you should take these courses, or the availability of these courses, please contact your advisor or the faculty contact listed below.

Program Contact Information

Office Contact: School of Liberal Arts: 313-845-9624, lainfo@hfcc.edu, Liberal Arts Building, Room: K-201 and F-138

Faculty Contact: Susan McGraw: 313-845-9842, scmcgraw@hfcc.edu, Fine Arts Bldg, Room: F-146

Academic Advisor: Sarah Krizan: 313-845-9889, smkrizan@hfcc.edu, Liberal Arts Bldg, Room: K-248

For students in an older version of this program, please visit Henry Ford College Catalog Archive to view required courses.

Year	Semester	Semester Credits
Year 1	Fall	16

Courses
- MCA157 - Digital Video Editing

Semester Credits
1
Contact Hours
16

Courses
- MCA131 - Intoduction to Media Communication

Semester Credits
3
Contact Hours
47

Courses
- MCA257 - Video Production

Semester Credits
3
Contact Hours
62

Courses
- CAT1 - Gen Ed Transfer - 2020

Semester Credits
3
Contact Hours
47

Courses
- CAT4 - Gen Ed Transfer - 2020

Semester Credits
3
Contact Hours
47

Courses
- Computer Technology - 2020

Semester Credits
3
Contact Hours
47

Year	Semester	Semester Credits
Year 1	Winter	15

Courses
- MCA132 - Film History and Criticism

Semester Credits
3
Contact Hours
47

Courses
- MCA151 - Digital Audio Editing

Semester Credits
1
Contact Hours
16

Courses
- MCA189 - Introduction to WHFR Radio

Semester Credits
1
Contact Hours
16

Courses
- MCA251 - Audio Production

Semester Credits
3
Contact Hours
47

Courses
- CAT2 - Gen Ed Transfer - 2020

Semester Credits
3
Contact Hours
47

Courses
- CAT3 - Coll Algebra - Gen Ed Transfer - 2020
  OR
- CAT3 - Quant Lit - Gen Ed Transfer - 2025
  OR
- CAT3 Stats - Gen Ed Transfer - 2025

Semester Credits
4
Contact Hours
62

Year	Semester	Semester Credits
Year 2	Fall	15

Courses
- MCA241 - Media Writing

Semester Credits
3
Contact Hours
47

Courses
- MCA243 - Media Performance

Semester Credits
3
Contact Hours
47

Courses
- CAT4 - Gen Ed Transfer - 2020

Semester Credits
3
Contact Hours
47

Courses
- CAT5 - Gen Ed Transfer - 2025

Semester Credits
3
Contact Hours
47

Courses
- CAT6 - Transfer - Lec and Lab - 2025
  OR
- CAT6 - Transfer - Lec Only - 2020
  OR
- CAT6 - Gen Ed Transfer - Lab Only - 2020

Semester Credits
3
Contact Hours
47

Year	Semester	Semester Credits
Year 2	Winter	14 - 15

Courses
- MCA261 - Broadcast Journalism

Semester Credits
3
Contact Hours
47

Courses
- CAT6 - Transfer - Lec and Lab - 2025
  OR
- CAT6 - Transfer - Lec Only - 2020
  OR
- CAT6 - Gen Ed Transfer - Lab Only - 2020

Semester Credits
4
Contact Hours
62

Courses
- ART107 - Photoshop
  OR
- ART114 - Graphic Design Studio 1
  OR
- ART150 - Digital Photography I
  OR
- MCA235 - Topics in Film and Media
  OR
- MCA258 - Advanced Media Production
  OR
- MCA294 - Media Communication Arts Internship
  OR
- MCA295 - Media Communication Arts Directed Study
  OR
- MGT241 - Small Bus Mgt & Entrepreneurship
  OR
- PSCI135 - Sound & Light in Fine-Arts
  OR
- THEA144 (Generic)
  OR
- THEA255 - Lighting

Semester Credits
3 - 4
Contact Hours
47 - 92

Courses
- Electives: Complete additional 100-level, or higher, credits to complete this degree. (Generic)

Semester Credits
4
Contact Hours
62

Program Requirements

Minimum Credits for Program Completion
60

Minimum GPA required for Graduation
2.000

HFC Credit Hour Residency Requirement
20

Simple Requisites

Core Course Requirements

Media Communication Arts AA - Core Course Requirements
Type
Completion Requirement

Required Courses

Complete ALL of the following Courses:
- MCA131-Intro to Media Communication 3 credits
- MCA132-Film History and Criticism 3 credits
- MCA151-Digital Audio Editing 1 credits
- MCA157-Digital Video Editing 1 credits
- MCA189-Introduction to WHFR Radio 1 credits
- MCA241-Media Writing 3 credits
- MCA243-Media Performance 3 credits
- MCA251-Audio Production 3 credits
- MCA257-Video Production 3 credits
- MCA261-Broadcast Journalism 3 credits

Support Course Requirements

Media Communication Arts AA - Support Course Requirements
Type
Completion Requirement

MCA-Telecommunication Support Courses

Complete ALL of the following Courses:
- ART107-Photoshop 3 credits
  OR ART114-Graphic Design Studio 1 3 credits
  OR ART150-Digital Photography I 3 credits
  OR MCA235-Topics in Film and Media 3 credits
  OR MCA258-Advanced Media Production 3 credits
  OR MCA294-Media Comm Arts Internship 3 credits
  OR MCA295-Media Comm Arts Directed Study 3 credits
  OR MGT241-Small Bus Mgmt & Entrepreneur 3 credits
  OR PSCI135-Sound & Light in Fine-Arts 4 credits
  OR THEA132-Acting I 3 credits
  OR THEA255-Lighting 3 credits

Electives

Complete additional 100-level, or higher, credits to complete this degree.

Earn at least 4 credits

General Education Requirements

Media Communication Arts AA - General Education Course Requirements
Type
Completion Requirement

Category 1: English Composition

Complete any one course from the General Education Requirements for Transfer Degrees (MTA) list.

Complete at least 1 courses in the following course sets:
- CAT1 - Gen Ed Transfer - 2020

Category 2: English Composition and Communications

Complete any one course from the General Education Requirements for Transfer Degrees (MTA) list.

Complete at least 1 courses in the following course sets:
- CAT2 - Gen Ed Transfer - 2020

Category 3: Mathematics

Complete any one course from the General Education Requirements for Transfer Degrees (MTA) list.

Complete at least 1 courses in the following course sets:
- CAT3 - Coll Algebra - Gen Ed Transfer - 2020
- CAT3 - Quant Lit - Gen Ed Transfer - 2025
- CAT3 Stats - Gen Ed Transfer - 2025

Category 4: Social Sciences

Complete any two, from different disciplines from the General Education Requirements for Transfer Degrees (MTA) list.

Complete at least 2 courses in the following course sets:
- CAT4 - Gen Ed Transfer - 2020

Category 5: Humanities and Fine Arts

Complete any one, from a different discipline (other than TCM or MCA) from the General Education Requirements for Transfer Degrees (MTA) list.

Complete at least 1 courses in the following course sets:
- CAT5 - Gen Ed Transfer - 2025

Category 6: Natural Sciences

Complete any two, including one with laboratory experience, from different disciplines from the General Education Requirements for Transfer Degrees (MTA) list.

Complete at least 2 courses in the following course sets:
- CAT6 - Transfer - Lec and Lab - 2025
- CAT6 - Transfer - Lec Only - 2020
- CAT6 - Gen Ed Transfer - Lab Only - 2020

Additional Comments:
See General Education Requirements for Transfer Degrees for details.

Degree Specific Requirements

Media Communication Arts AA - Degree Specific Course Requirements
Type
Completion Requirement

Computer Technology

Earn at least 3 credits from the following:
- Computer Technology - 2020

Additional Comments:
See Degree Specific Requirements for details.

MILLWR.TA.CA - Millwright

Program Information

Program Title
Millwright

Program Code
MILLWR.TA.CA

Degree Type
Certificate of Achievement

Subject
Skilled Trade & Apprenticeship

Semesters to Complete Program
2

Program Description
This program provides students with experience in the installation, repair and maintenance of the complex industrial mechanical machinery in existing and new construction.

Faculty Contact
Richard Cieslak

Faculty Contact Email
rfcieslak@hfcc.edu

Faculty Contact Phone
313-845-9645

Faculty Contact Office Location
E-164

Academic Advisor
Rachel VanZutphen

Academic Advisor Contact Email
rvanzutphen@hfcc.edu

Academic Advisor Contact Phone
313-845-9873

Academic Advisor Office Location
E-211L

School
Business, Entrepreneurship, PD

Academic Department
Skilled Trade & Apprenticeship

Admissions Requirements

Admissions Requirements
Additional Program Requirements

Complete a minimum of 38 additional credit hours in courses required within your specialization.

Program Learning Outcomes

Develop safe working habits with advanced technology tools & equipment.

Apply digital skills in the application of different advanced technologies.

Apply quantitative skills in the application of different advanced technologies.

Demonstrate technological literacy of different advanced technologies through vocabulary, terminology and applications.

Develop appropriate communications tools and strategies for different advanced technological applications.

What Classes do I take?

2-Year Plan
None
Total Credits
0

Program Requirements

Minimum Credits for Program Completion
8

Minimum GPA required for Graduation
2.000

HFC Credit Hour Residency Requirement
20

Simple Requisites

Core Course Requirements

Millwright CA - Core Course Requirements
Type
Completion Requirement

Complete ALL of the following Courses:
- TAMA120-Indust Appl of Algebraic Princ 3 credits
- TAMA130-Indust Appl Geometric Prin 2 credits
- TAMA200-Indust Appl Trigonomic Princip 3 credits

Graphic Design: Complete courses based on specific company RTI

Complete ALL of the following Courses:
- TAGD110-Basic Shape & Size Interpret 3 credits

Maintenance/Craft Theory: Complete courses based on specific company RTI

Enroll in the following Courses:
- TAMT115-Maintenan Trades Print Reading 3 credits
- TAMT123-Main Print Read: Struct Steel 2 credits
- TAMT126-Main Print Read: Plant Layout 2 credits
- TAMT200-Predictive Maint Shaft Align 2 credits
- TAMT210-Predict Maint-Vibration Analys 2 credits
- TAMT220-Advanced Rigging 2 credits
- TAMT260-Gearing 2 credits

Welding: Complete courses based on specific company RTI

Enroll in the following Courses:

Electives: Complete courses based on specific company RTI

RTI (Related Training Instruction)

Employer specific document that details HFC courses needed to meet employer knowledge and skill requirements and fulfills HFC degree or certificate requirements.

Enroll in the following Courses:
- PLMB101-Fund of Plumbing & Pipefitting 3 credits
- TAEL103-DC & AC Electricity 4 credits
- TAFD120-Industrial Safety Awareness 2 credits
- TAFD130-Indust App of Phys Science 3 credits
- TAFD150-Applied Technology 3 credits
- TAFP160-Pneumatic Power & Control 4 credits
- TAMA110-Industrial Appl of Basic Math 2 credits
- TAMT110-Mechanical Power Transmission 2 credits
- TASM100-Basic Sheet Metal & Fabricat 3 credits

Millwright - AK Steel (F78)
Type
Completion Requirement

Mathematics

Credit Hours: 10

Complete ALL of the following Courses:
- TAMA110-Industrial Appl of Basic Math 2 credits
- TAMA120-Indust Appl of Algebraic Princ 3 credits
- TAMA130-Indust Appl Geometric Prin 2 credits
- TAMA200-Indust Appl Trigonomic Princip 3 credits

Foundations

Credit Hours: 9

Complete ALL of the following Courses:
- TAFD117-Industrial Computer Applicatio 3 credits
- TAFD130-Indust App of Phys Science 3 credits
- TAFD150-Applied Technology 3 credits

Drafting

Credit Hours: 3

Complete ALL of the following Courses:
- TAGD110-Basic Shape & Size Interpret 3 credits

Mechanical

Credit Hours: 13

Complete ALL of the following Courses:
- TAMT110-Mechanical Power Transmission 2 credits
- TAMT115-Maintenan Trades Print Reading 3 credits
- TAMT123-Main Print Read: Struct Steel 2 credits
- TAMT126-Main Print Read: Plant Layout 2 credits
- TAMT200-Predictive Maint Shaft Align 2 credits
- TAMT220-Advanced Rigging 2 credits

Fluid Power

Credit Hours: 15

Complete ALL of the following Courses:
- TAFP150-Intro to Industrial Hydraulics 4 credits
- TAFP160-Pneumatic Power & Control 4 credits
- TAFP270-Fluid Pow Sys: Circuit Design 4 credits
- TAFP280-Appl Electrohydraulics 3 credits

Plumbing/Pipefitting

Credit Hours: 5

Complete ALL of the following Courses:
- PLMB101-Fund of Plumbing & Pipefitting 3 credits
- PLMB250-Plumbing Pipefitting Code 2 credits

Sheet Metal

Credit Hours: 3

Complete ALL of the following Courses:
- TASM100-Basic Sheet Metal & Fabricat 3 credits

Shop Theory

Credit Hours: 7

Complete ALL of the following Courses:
- MTT100-Machine Tool Processes I 4 credits
- MTT120-Practical Prob in Mach Tools I 3 credits

Welding

Credit Hours: 10

Complete ALL of the following Courses:

Additional Comments:

MILLWRIGHT	
Related Program: Millwright	**Related Apprenticeship Program:**
Employer Code: F78	**Employer Name**: AK Steel
RAPIDS:	**MARC:**
DOL Approved:	**Apprenticeship Code**:
CIP Code: 47.0303	**Minimum Total Credit Hours**: 75

Millwright - AK Steel (C98)
Type
Completion Requirement

Mathematics

Credit Hours: 12

Complete ALL of the following Courses:
- TAMA110-Industrial Appl of Basic Math 2 credits
- TAMA120-Indust Appl of Algebraic Princ 3 credits
- TAMA130-Indust Appl Geometric Prin 2 credits
- TAMA200-Indust Appl Trigonomic Princip 3 credits
- TAMT260-Gearing 2 credits

Drafting

Credit Hours: 12

Complete ALL of the following Courses:

- TAGD110-Basic Shape & Size Interpret 3 credits
- TAMT123-Main Print Read: Struct Steel 2 credits
- TAMT200-Predictive Maint Shaft Align 2 credits
- TAMT126-Main Print Read: Plant Layout 2 credits
- TAMT115-Maintenan Trades Print Reading 3 credits

Electrical

Credit Hours: 4

Complete ALL of the following Courses:
- TAEL103-DC & AC Electricity 4 credits

Shop Theory

Credit Hours: 6

Complete ALL of the following Courses:
- TAMT210-Predict Maint-Vibration Analys 2 credits
- TAMT220-Advanced Rigging 2 credits
- TAFD120-Industrial Safety Awareness 2 credits

Fluid Power

Credit Hours: 8

Complete ALL of the following Courses:
- TAFP150-Intro to Industrial Hydraulics 4 credits
- TAFP160-Pneumatic Power & Control 4 credits

Metallurgy

Credit Hours: 2

Complete ALL of the following Courses:

Plumbing

Credit Hours: 3

Complete ALL of the following Courses:
- PLMB101-Fund of Plumbing & Pipefitting 3 credits

Welding

Credit Hours: 3

Complete ALL of the following Courses:

Additional Comments:

MILLWRIGHT	
Related Program: Millwright	**Related Apprenticeship Program:**
Employer Code: C98	**Employer Name**: Diamler Chrysler
RAPIDS:	**MARC:**
DOL Approved:	**Apprenticeship Code**:
CIP Code: 47.0303	**Minimum Total Credit Hours**: 50

Millwright - AAI Services Flat Rock (F54)
Type
Completion Requirement

Mathematics

Credit Hours: 10

Complete ALL of the following Courses:
- TAMA110-Industrial Appl of Basic Math 2 credits
- TAMA120-Indust Appl of Algebraic Princ 3 credits
- TAMA130-Indust Appl Geometric Prin 2 credits
- TAMA200-Indust Appl Trigonomic Princip 3 credits

Drafting

Credit Hours: 6

Complete ALL of the following Courses:
- TAGD110-Basic Shape & Size Interpret 3 credits
- TAMT115-Maintenan Trades Print Reading 3 credits

Maintenance

Credit Hours: 14

Complete ALL of the following Courses:
- TAMT110-Mechanical Power Transmission 2 credits
- TAMT123-Main Print Read: Struct Steel 2 credits
- TAMT126-Main Print Read: Plant Layout 2 credits
- TAMT200-Predictive Maint Shaft Align 2 credits
- TAMT210-Predict Maint-Vibration Analys 2 credits
- TAMT220-Advanced Rigging 2 credits
- TAMT260-Gearing 2 credits

Foundations

Credit Hours: 11

Complete ALL of the following Courses:
- TAFD130-Indust App of Phys Science 3 credits
- TAFD150-Applied Technology 3 credits
- TASM100-Basic Sheet Metal & Fabricat 3 credits

Welding

Credit Hours: 3

Complete ALL of the following Courses:

Additional Comments:

MILLWRIGHT	
Related Program: Millwright	**Related Apprenticeship Program:**
Employer Code: F54	**Employer Name**: AAI Services Flat Rock
RAPIDS:	**MARC:**
DOL Approved:	**Apprenticeship Code**:
CIP Code: 47.0303	**Minimum Total Credit Hours**: 44

Millwright - FMC Livonia Transmission (F53)
Type
Completion Requirement

Mathematics

Credit Hours: 10

Complete ALL of the following Courses:
- TAMA110-Industrial Appl of Basic Math 2 credits
- TAMA120-Indust Appl of Algebraic Princ 3 credits
- TAMA130-Indust Appl Geometric Prin 2 credits
- TAMA200-Indust Appl Trigonomic Princip 3 credits

Drafting

Credit Hours: 6

Complete ALL of the following Courses:
- TAGD110-Basic Shape & Size Interpret 3 credits
- TAMT115-Maintenan Trades Print Reading 3 credits

Maintenance

Credit Hours: 14

Complete ALL of the following Courses:
- TAMT110-Mechanical Power Transmission 2 credits
- TAMT123-Main Print Read: Struct Steel 2 credits
- TAMT126-Main Print Read: Plant Layout 2 credits
- TAMT200-Predictive Maint Shaft Align 2 credits
- TAMT210-Predict Maint-Vibration Analys 2 credits
- TAMT220-Advanced Rigging 2 credits
- TAMT260-Gearing 2 credits

Foundations

Credit Hours: 11

Complete ALL of the following Courses:
- TAFD130-Indust App of Phys Science 3 credits
- TAFD150-Applied Technology 3 credits
- TASM100-Basic Sheet Metal & Fabricat 3 credits

Welding

Credit Hours: 3

Complete ALL of the following Courses:

Additional Comments:

MILLWRIGHT	
Related Program: Millwright	**Related Apprenticeship Program:**
Employer Code: F53	**Employer Name**: FMC - Livonia Transmission
RAPIDS:	**MARC:**
DOL Approved:	**Apprenticeship Code**:
CIP Code: 47.0303	**Minimum Total Credit Hours**: 44

Millwright - FMC Livonia Transmission (F71)
Type
Completion Requirement

Mathematics

Credit Hours: 10

Complete ALL of the following Courses:
- TAMA110-Industrial Appl of Basic Math 2 credits
- TAMA120-Indust Appl of Algebraic Princ 3 credits
- TAMA130-Indust Appl Geometric Prin 2 credits
- TAMA200-Indust Appl Trigonomic Princip 3 credits

Drafting

Credit Hours: 6

Complete ALL of the following Courses:
- TAGD110-Basic Shape & Size Interpret 3 credits
- TAMT115-Maintenan Trades Print Reading 3 credits

Maintenance

Credit Hours: 14

Complete ALL of the following Courses:
- TAMT110-Mechanical Power Transmission 2 credits
- TAMT123-Main Print Read: Struct Steel 2 credits
- TAMT126-Main Print Read: Plant Layout 2 credits
- TAMT200-Predictive Maint Shaft Align 2 credits
- TAMT210-Predict Maint-Vibration Analys 2 credits
- TAMT260-Gearing 2 credits

Foundations

Credit Hours: 11

Complete ALL of the following Courses:
- TAFD130-Indust App of Phys Science 3 credits
- TAFD150-Applied Technology 3 credits

- TASM100-Basic Sheet Metal & Fabricat 3 credits

Welding

Credit Hours: 3

Complete ALL of the following Courses:

Additional Comments:

MILLWRIGHT	
Related Program: Millwright	**Related Apprenticeship Program:**
Employer Code: F71	**Employer Name**: FMC - Livonia Transmission
RAPIDS:	**MARC:**
DOL Approved:	**Apprenticeship Code**:
CIP Code: 47.0303	**Minimum Total Credit Hours**: 44

Millwright - FMC Rawsonville (F50)
Type
Completion Requirement

Mathematics

Credit Hours: 10

Complete ALL of the following Courses:
- TAMA110-Industrial Appl of Basic Math 2 credits
- TAMA120-Indust Appl of Algebraic Princ 3 credits
- TAMA130-Indust Appl Geometric Prin 2 credits
- TAMA200-Indust Appl Trigonomic Princip 3 credits

Drafting

Credit Hours: 6

Complete ALL of the following Courses:
- TAGD110-Basic Shape & Size Interpret 3 credits
- TAMT115-Maintenan Trades Print Reading 3 credits

Maintenance

Credit Hours: 14

Complete ALL of the following Courses:
- TAMT110-Mechanical Power Transmission 2 credits
- TAMT123-Main Print Read: Struct Steel 2 credits
- TAMT126-Main Print Read: Plant Layout 2 credits
- TAMT200-Predictive Maint Shaft Align 2 credits
- TAMT210-Predict Maint-Vibration Analys 2 credits
- TAMT220-Advanced Rigging 2 credits
- TAMT260-Gearing 2 credits

Foundations

Credit Hours: 11

Complete ALL of the following Courses:
- TAFD130-Indust App of Phys Science 3 credits
- TAFD150-Applied Technology 3 credits
- TASM100-Basic Sheet Metal & Fabricat 3 credits

Welding

Credit Hours: 3

Complete ALL of the following Courses:

Additional Comments:

MILLWRIGHT	
Related Program: Millwright	**Related Apprenticeship Program:**
Employer Code: F50	**Employer Name**: FMC - Rawsonville
RAPIDS:	**MARC:**
DOL Approved:	**Apprenticeship Code**:
CIP Code: 47.0303	**Minimum Total Credit Hours**: 44

Millwright - FMC - Research & Engineering (F73)
Type
Completion Requirement

Mathematics

Credit Hours: 10

Complete ALL of the following Courses:
- TAMA110-Industrial Appl of Basic Math 2 credits
- TAMA120-Indust Appl of Algebraic Princ 3 credits
- TAMA130-Indust Appl Geometric Prin 2 credits
- TAMA200-Indust Appl Trigonomic Princip 3 credits

Drafting

Credit Hours: 6

Complete ALL of the following Courses:
- TAGD110-Basic Shape & Size Interpret 3 credits
- TAMT115-Maintenan Trades Print Reading 3 credits

Maintenance

Credit Hours: 14

Complete ALL of the following Courses:
- TAMT110-Mechanical Power Transmission 2 credits
- TAMT123-Main Print Read: Struct Steel 2 credits
- TAMT126-Main Print Read: Plant Layout 2 credits
- TAMT200-Predictive Maint Shaft Align 2 credits
- TAMT210-Predict Maint-Vibration Analys 2 credits

- TAMT220-Advanced Rigging 2 credits
- TAMT260-Gearing 2 credits

Foundations

Credit Hours: 11

Complete ALL of the following Courses:
- TAFD130-Indust App of Phys Science 3 credits
- TAFD150-Applied Technology 3 credits
- TASM100-Basic Sheet Metal & Fabricat 3 credits

Welding

Credit Hours: 3

Complete ALL of the following Courses:

Additional Comments:

MILLWRIGHT	
Related Program: Millwright	**Related Apprenticeship Program:**
Employer Code: F73	**Employer Name**: FMC - Research & Engineering
RAPIDS:	**MARC:**
DOL Approved:	**Apprenticeship Code**:
CIP Code: 47.0303	**Minimum Total Credit Hours**: 44

MITRANSAGREEMENT.CA - Michigan Transfer Agreement

Program Information

Program Title
Michigan Transfer Agreement

Program Code
MITRANSAGREEMENT.CA

Degree Type
Certificate of Achievement

Minimum Credits for Program Completion
30

Subject
Liberal Arts

Semesters to Complete Program
2

Program Description
Michigan Transfer Agreement

Faculty Contact
Brad Romans

Faculty Contact Email
bpromans@hfcc.edu

Faculty Contact Phone
313-845-6385

Faculty Contact Office Location
K-208

School
Liberal Arts

Academic Department
Social Science

Admissions Requirements

Admissions Requirements
Students **must** select one the following degree types for their program of study to be automatically admitted to this certificate program:

- Associate in Arts
- Associate in Science
- Associate in General Studies

Once requirements are complete a graduation application should be submitted for receipt of the certificate.

Program Learning Outcomes

Compare and contrast the United States with other nations or world regions, addressing social (economic, political and cultural) issues, patterns of diversity, or aspects of inequality.

Effectively communicate ideas appropriate to their discipline using standard English, through written and verbal communication.

Demonstrate skills for computer technology, including Internet, network and advanced file operations. Skills will include organizing, managing, and presenting data using office productivity software. Students will also identify security and integrity threats and identify unethical actions within their social or professional environments.

Analyze and evaluate information and identify the need for research to draw conclusions, formulate inferences, solve problems and make decisions. Students will also demonstrate information literacy skills by locating, evaluating, selecting, organizing, synthesizing, and ethically documenting information from multiple sources using both informal and formal formats, as appropriate for diverse writing situations.

Apply quantitative skills to analyze situations and make decisions in a variety of contexts.

What Classes do I take?

2-Year Plan
Michigan Transfer Agreement - CA: Recommended Sequence - Current
Total Credits
30
Description
Enrollment Status: Full Time

If you have questions about the order in which you should take these courses, or the availability of these courses, please contact your advisor or the faculty contact listed below.

Program Contact Information

Office Contact: School of Liberal Arts: 313-845-9624, lainfo@hfcc.edu, Liberal Arts Building, Room: K-201 and F-138

Faculty Contact: Brad Romans: 313-845-6385, bpromans@hfcc.edu, Liberal Arts Building, Room: K-208

For students in an older version of this program, please visit Henry Ford College Catalog Archive to view required courses.

Year	Semester	Semester Credits
Year 1	Fall	14

Courses
- CAT1 - Gen Ed Transfer - 2020

Semester Credits 3
Contact Hours 47

Courses
- CAT3 - Coll Algebra - Gen Ed Transfer - 2020
  OR
- CAT3 - Quant Lit - Gen Ed Transfer - 2025
  OR
- CAT3 Stats - Gen Ed Transfer - 2025

Semester Credits 4
Contact Hours 62

Courses
- CAT4 - Gen Ed Transfer - 2020

Semester Credits 3
Contact Hours 47

Courses
- CAT6 - Transfer - Lec and Lab - 2025
  OR
- CAT6 - Transfer - Lec Only - 2020
  OR
- CAT6 - Gen Ed Transfer - Lab Only - 2020

Semester Credits 3
Contact Hours 47

Courses
- Gen Ed - 1 hr - 2025

Semester Credits 1
Contact Hours 16

Year	Semester	Semester Credits
Year 1	Winter	16

Courses
- CAT2 - Gen Ed Transfer - 2020

Semester Credits 3
Contact Hours 47

Courses
- CAT4 - Gen Ed Transfer - 2020

Semester Credits 3
Contact Hours 47

Courses
- CAT5 - Gen Ed Transfer - 2025

Semester Credits 3
Contact Hours 47

Courses
- CAT5 - Gen Ed Transfer - 2025

Semester Credits 3
Contact Hours 47

Courses
- CAT6 - Transfer - Lec and Lab - 2025
  OR
- CAT6 - Transfer - Lec Only - 2020
  OR
- CAT6 - Gen Ed Transfer - Lab Only - 2020

Semester Credits 4
Contact Hours 62

Program Requirements

Minimum Credits for Program Completion
30

Minimum GPA required for Graduation
2.000

HFC Credit Hour Residency Requirement
20

Simple Requisites

General Education Requirements

Michigan Transfer Agreement CA - General Education Course Requirements
Type
Completion Requirement

Category 1: English Composition

Complete any one English Composition course from the General Education Requirements for Transfer Degrees (MTA) list.

Complete at least 1 courses in the following course sets:
- CAT1 - Gen Ed Transfer - 2020

Category 2: English Composition or Communications

Complete any one additional English Composition or Communications course from the Michigan Transfer Agreement (MTA) list.

Complete at least 1 courses in the following course sets:
- CAT2 - Gen Ed Transfer - 2020

Category 3: Mathematics

Complete any one Mathematics course from the Michigan Transfer Agreement (MTA) list.

Complete at least 1 courses in the following course sets:
- CAT3 - Coll Algebra - Gen Ed Transfer - 2020
- CAT3 - Quant Lit - Gen Ed Transfer - 2025
- CAT3 Stats - Gen Ed Transfer - 2025

Category 4: Social Sciences

Complete any two Social Science courses from the General Education Requirements for Transfer Degrees (MTA) list, from two different disciplines (subjects).

Complete at least 2 courses in the following course sets:
- CAT4 - Gen Ed Transfer - 2020

Category 5: Humanities and Fine Arts

Complete any two Humanities and Fine Arts courses from the General Education Requirements for Transfer Degrees (MTA) list, from two different disciplines (subjects).

Complete at least 2 courses in the following course sets:
- CAT5 - Gen Ed Transfer - 2025

Category 6: Natural Sciences

Complete any two Natural Science courses, including one with laboratory experience, from two disciplines (subjects).

Complete at least 2 courses in the following course sets:
- CAT6 - Transfer - Lec and Lab - 2025
- CAT6 - Transfer - Lec Only - 2020

- CAT6 - Gen Ed Transfer - Lab Only - 2020

Category 7: General Education

Complete additional courses from the General Education Requirements for Transfer Degrees (MTA) list, if needed, to reach 30 total credits.

Additional Comments:
See General Education Requirements for Transfer Degrees for details.

MITRANSAGREEMENT.ND - Michigan Transfer Agreement Non Degree

Program Information

Program Title
Michigan Transfer Agreement Non Degree

Program Code
MITRANSAGREEMENT.ND

Degree Type
Cert of Achieve - Single, Mich Trans Agreement Satisfied

Program Description
Michigan Transfer Agreement

What Classes do I take?

2-Year Plan
No Sequence documented
Total Credits
0

MNGMT.AB - Management

Program Information

Program Title
Management AB Degree

Program Code
MNGMT.AB

Degree Type
Associate in Business

Minimum Credits for Program Completion
60

Program Eligible for Financial Aid?
Yes

Subject
Management

Semesters to Complete Program
4

Program Description
Assists students in gaining the necessary knowledge and competencies to succeed in acquiring an entry-level or promoting to a higher-level management position. Explores the fundamentals of management, creative problem solving techniques, and interpersonal skills for supervision and team building. The knowledge and skills that successful students obtain in this program are relevant to a variety of business organizations. Students may earn a Certificate in Supervision as they fulfill the requirements of the Management degree program.

Faculty Contact
Corinne Asher

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Faculty Contact Phone
313-845-9867

Faculty Contact Office Location
K-325

Academic Advisor
Ashlei Chears

Academic Advisor Contact Email
achears@hfcc.edu

Academic Advisor Contact Phone
313-845-6486

Academic Advisor Office Location
E-211H

School
Business, Entrepreneurship, PD

Academic Department
Business & Economics

Program Learning Outcomes

Interpret basic financial statements.

Apply management theory to effectively supervise the human resources of an organization.

Evaluate management decisions given an organizations relationship to the external business environment.

Creatively solve common problems in managing an organization.

Demonstrate effective non-verbal and verbal communication skills for a business environment.

Demonstrate effective written communication for a business environment.

Employ computer applications to perform business activities.

Apply quantitative skills to analyze situations and make decisions in a business environment.

What Classes do I take?

2-Year Plan
Management - AB: Recommended Sequence - Current
Total Credits
60 - 63
Description
Enrollment Status: Full Time

If you have questions about the order in which you should take these courses, or the availability of these courses, please contact your advisor or the faculty contact listed below.

Program Contact Information

Office Contact: School of Business, Entrepreneurship, and Professional Development: 313-845-9645, bepdinfo@hfcc.edu, Technology Bldg, Room: E-211

Faculty Contact: Corinne Asher: 313-845-9867, casher@hfcc.edu, Liberal Arts Building, Room: K-325

Academic Advisor: Ashlei Chears: 313-845-6486, achears@hfcc.edu, Technology Bldg, Room: E-211H

For students in an older version of this program, please visit Henry Ford College Catalog Archive to view required courses.

Year	Semester	Semester Credits
Year 1	Fall	16

Courses
- BBA110 - Business Grammar and Punctuation

Semester Credits 3
Contact Hours 47

Courses
- BBA131 - Introduction to Business

Semester Credits 4
Contact Hours 62

Courses
- BBA133 - Business Behavior and Communication

Semester Credits 3
Contact Hours 47

Courses
- CIS100 - Introduction to Information Technology

Semester Credits 3
Contact Hours 47

Courses
- SPC131 - Intro to Public Speaking

Semester Credits
3
Contact Hours
47

Year	Semester	Semester Credits
Year 1	Winter	15 - 18

Courses
- BEC151 - Principles of Macroeconomics

Semester Credits
3
Contact Hours
47

Courses
- ENG131 - Introduction to College Writing

Semester Credits
3
Contact Hours
47

Courses
- MGT230 - Principles of Management

Semester Credits
3
Contact Hours
47

Courses
- MGT231 - Leadership and Teambuilding

Semester Credits
3
Contact Hours
47

Courses
- BMA110 - Business Math
  OR
- MATH115 - College Algebra
  OR
- MATH131 - Mathematics for the Modern World
  OR
- MATH141 - Introduction to Statistics
  OR
- MATH165 - Mathematics for Calculus
  OR
- MATH175 - Precalculus
  OR
- MATH180 - Calculus I
  OR
- MATH183 - Calculus II
  OR
- MATH275 - Discrete Mathematics
  OR
- MATH280 - Calculus III
  OR
- MATH283 - Linear Algebra
  OR
- MATH288 - Differential Equations

Semester Credits
3 - 6
Contact Hours
47 - 92

Year	Semester	Semester Credits
Year 2	Fall	13

Courses
- BEC152 - Principles of Microeconomics

Semester Credits
3
Contact Hours
47

Courses
- MGT237 - Organizational Behavior

Semester Credits
3
Contact Hours
47

Courses
- BAC110 - Practical Accounting
  OR
- BAC131 - Introduction to Financial Accounting

Semester Credits
4
Contact Hours
62

Courses
- ENG132 - College Writing and Research
  OR
- ENG132H - Honors College Writing and Research
  OR
- ENG135 - Business & Technical Writing & Research

Semester Credits
3
Contact Hours
47

Year	Semester	Semester Credits
Year 2	Winter	16

Courses
- BBA231 - Business Communications

Semester Credits 3
Contact Hours 47

Courses
- BLW253 - Business Law and the Legal Environment

Semester Credits 4
Contact Hours 62

Courses
- Electives: Complete additional 100-level, or higher, credits to complete this degree. (Generic)

Semester Credits 9
Contact Hours 144

Program Requirements

Minimum Credits for Program Completion
60

Minimum GPA required for Graduation
2.000

HFC Credit Hour Residency Requirement
20

Simple Requisites

Core Course Requirements

Management AB - Core Course Requirements
Type
Completion Requirement

Complete ALL of the following Courses:
- BEC151-Prin Macro Economics 3 credits
- BEC152-Prin Micro Economics 3 credits
- MGT230-Principles of Management 3 credits
- MGT231-Leadership and Teambuilding 3 credits
- MGT237-Organizational Behavior 3 credits

Accounting

Complete at least 1 of the following courses:
- BAC110-Practical Accounting 4 credits
  OR BAC131-Intro to Financial Accounting 4 credits

Support Course Requirements

Management AB - Support Course Requirements
Type
Completion Requirement

Complete ALL of the following Courses:
- BBA110-Business Grammar & Punctuation 3 credits
- BBA131-Intro to Business 4 credits
- BBA133-Bus Behavr & Comm 3 credits
- BBA231-Business Communications 3 credits
- BLW253-Business Law & Legal Environme 4 credits
- CIS100-Intro Info Tech 3 credits
- ENG131-Introduction College Writing 3 credits
- SPC131-Introduction Public Speaking 3 credits

Category 2: English Composition or Communications

Complete at least 1 of the following courses:
- ENG132-College Writing and Research 3 credits
  OR ENG132H-Honors Coll Writing & Research 3 credits
  OR ENG135-Bus & Tech Writing & Research 3 credits

Category 3: Mathematics

Complete at least 1 of the following courses:
- BMA110-Business Math 3 credits
  OR MATH115-College Algebra 5 credits
  OR MATH131-Math for the Modern World 4 credits
  OR MATH141-Introduction to Statistics 4 credits
  OR
  OR MATH165-Mathematics for Calculus 6 credits
  OR MATH175-Precalculus 5 credits
  OR MATH180-Calculus 1 5 credits
  OR MATH183-Calculus II 5 credits
  OR MATH275-Discrete Mathematics 4 credits
  OR MATH280-Calculus III 5 credits
  OR MATH283-Linear Algebra 3 credits
  OR MATH288-Differential Equations 5 credits

Elective Hours

Earn at least 9 credits

MPCM.AAS - Medical Practice Clinical Management

Program Information

Program Title
Medical Practice - Clinical Management AAS Degree

Program Code
MPCM.AAS

Degree Type
Associate in Applied Science

Minimum Credits for Program Completion
60

Program Eligible for Financial Aid?
Yes

Subject
Medical Office Assistant

Semesters to Complete Program
6

Program Description
Focuses on the preparation and the foundation necessary to prepare medical assistants for increasing management responsibility within the medical office or clinic and to perform routine administrative duties in physicians' offices, clinics, and other ambulatory health care facilities. Students may elect to stop out at either one of the following two stages depending upon career or educational objectives.

* Medical Assistant, Level II Certificate of Achievement, 36 credit hours
* Medical Practice - Clinical Management Associate in Applied Science degree, 64 credit hours.

Credits in this certificate program may be applied to the Associate in Applied Science degree centered around the Medical Assistant.

Program Accreditation Information
The medical assistant Certificate of Achievement portion of the program is accredited by the Commission on Accreditation of Allied Health Education Programs upon the recommendation of the Medical Assistant Education Review Board (MAERB).

Commission on Accreditation of Allied Health Education Programs
9355-113th St N. #7709
Seminole, FL 33775
727-210-2350
www.caahep.org

Faculty Contact
Jennifer Paducha

Faculty Contact Email
jlpaducha@hfcc.edu

Faculty Contact Phone
313-845-6466

Faculty Contact Office Location
G-133B

Academic Advisor
Samer Atris

Academic Advisor Contact Email
satris1@hfcc.edu

Academic Advisor Contact Phone
313-317-6862

Academic Advisor Office Location
G-203C

School
Health & Human Services

Academic Department
Health Careers, Education, and Human Services

Admissions Requirements

Admissions Requirements
Admission Requirements and Eligibility

1. A minimum high school grade-point-average of C+ (2.5) or a minimum average score of 55 on the GED test, or a minimum college grade-point-average of C (2.25) for both transfer students and Henry Ford College students.
2. ACCUPLACER next Gen Reading score of 231 or higher.
3. Successful completion of MATH100 or higher with a C or better.
4. Successful completion of AH132 or higher with a C or better.

The program is restricted, has a limited enrollment, and admits students based on space availability. Admission is on a first-come, first-served basis. Students must see the Health Careers Program Advisor for admission to the program and are highly encouraged to complete their admission requirements as early as possible.

Additional Program Requirements

Accreditation standards require that students do not receive compensation/payment, monetary or otherwise, from any clinical site for any portion of their clinical practicum (MOA190 Medical Office Externship – Medical Office Externship). In order to begin the clinical procedures course of the Medical Practice - Clinical Management AAS Degree program, MOA152 Med Assist. Clinical Proc II, students must meet the following pre-requisites:

The following courses must be taken within the same academic year in the following sequence:
Fall - MOA122 Intro Med Asst Clinical Proced
Winter- MOA152 Med Assist. Clinical Proc II
Spring - MOA190 Medical Office Externship

In order to begin the clinical procedures course of the Medical Assistant component MOA152 Med Assist. Clinical Proc II students must complete the following pre-requisites all with a B- or better:

MOA101 Admin Medical Procedures I
MOA110 Process Hlth Insurance Claims
MOA122 Intro Med Asst Clinical Proced

And the following with a C or better:

MATH100 Basic Tech Mathematics or higher
BIO134 Essentials Anatomy&Physiology or both BIO233 Anatomy and Physiology I and BIO234 Anatomy and Physiology II

During the program the students will be required to submit proof of all of the following by **designated program deadlines**:

- Active health insurance coverage.
- Completion of physical examination.
- Two-step tuberculosis PPD test (2-step TB test).
- Evidence of required immunizations and titers.
- American Heart Association, Basic Life Support for Healthcare Providers (AHA-BLS for Healthcare Providers card) valid throughout the Medical Assisting coursework (may be satisfied by AH105 Basic Life Support Healthcare).
- Valid driver's license or state issued identification card with a photo.
- Must pass the drug screen on the first test.
- Criminal background check.

Courses Required for Program Admission
AH132 - Introduction to Healthcare Professions

Program Learning Outcomes

Perform entry level patient assessment and care in an ambulatory setting showing proficiency in patient safety, wellness and education based on scope of practice and national standards.

Demonstrate mathematical processes related to administering medication, mensuration of a patient using various methodologies, and reading clinical/laboratory equipment and graphs.

Demonstrate clinical lab procedures, safety and emergency procedures along with patient preparation in the ambulatory and inpatient care setting.

Communicate effectively using verbal, non-verbal, and written communication as it relates to various health care providers and businesses.

Perform administrative duties based on scope of practice as it relates to finances, billing and insurance, and effective practice management.

Apply management theory to effectively supervise the human resources of an organization.

Solve common problems in managing the business office of a medical or medical related organization.

What Classes do I take?

2-Year Plan
Medical Practice Clinical Management - AAS: Recommended Sequence - Current
Total Credits
60 - 65
Description
Enrollment Status: Full Time

If you have questions about the order in which you should take these courses, or the availability of these courses, please contact your advisor or the faculty contact listed below.

Program Contact Information

Office Contact: School of Health and Human Services: 313-845-9877, hhsinfo@hfcc.edu, Health Careers Education Ctr, Room: G-132

Faculty Contact: Jennifer Paducha: 313-845-6466, jlpaducha@hfcc.edu, Health Careers Education Ctr, Room: G-133B

Academic Advisor: Samer Atris: 313-317-6862, satris1@hfcc.edu, Health Careers Bldg, Room: G-203C

For students in an older version of this program, please visit Henry Ford College Catalog Archive to view required courses.

Year	Semester	Semester Credits
Year 1	Summer	7 - 9

Courses
- AH132 - Introduction to Healthcare Professions

Semester Credits 3
Contact Hours 62

Courses
- CAT3 - Gen Ed Applied - 2025

Semester Credits 4 - 6
Contact Hours 62 - 92

Year	Semester	Semester Credits
Year 1	Fall	11 - 14

Courses
- MOA101 - Administrative Medical Procedures I

Semester Credits 4
Contact Hours 62

Courses
- MOA122 - Intro to Medical Assistant Clinical Proc

Semester Credits 2
Contact Hours 47

Courses
- BIO134 - Essentials of Anatomy and Physiology
  OR
- BIO233 - Anatomy and Physiology I
- **AND** BIO234 - Anatomy and Physiology II

Semester Credits 5 - 8
Contact Hours 92 - 154

Year	Semester	Semester Credits
Year 1	Winter	11

Courses
- MOA152 - Medical Assistant Clinical Procedure II

Semester Credits 5
Contact Hours 107

Courses
- PSY131 - Introductory Psychology

Semester Credits 3
Contact Hours 47

Courses
- HCS131 - Computers in Health Care

Semester Credits 3
Contact Hours 47

Year	Semester	Semester Credits
Year 2	Summer	4

Courses
- MOA190 - Medical Office Externship

Semester Credits 4
Contact Hours 173

Year	Semester	Semester Credits
Year 2	Fall	13

Courses
- BBA131 - Introduction to Business

Semester Credits
4
Contact Hours
62

Courses
- BBA133 - Business Behavior and Communication

Semester Credits
3
Contact Hours
47

Courses
- ENG131 - Introduction to College Writing

Semester Credits
3
Contact Hours
47

Courses
- MGT230 - Principles of Management

Semester Credits
3
Contact Hours
47

Year	Semester	Semester Credits
Year 2	Winter	14

Courses
- ENG132 - College Writing and Research
  OR
- ENG132H - Honors College Writing and Research
  OR
- ENG135 - Business & Technical Writing & Research

Semester Credits
3
Contact Hours
47

Courses
- MGT231 - Leadership and Teambuilding

Semester Credits
3
Contact Hours
47

Courses
- Elective Hours (Generic)

Semester Credits
8
Contact Hours
128

2-Year Plan
Medical Practice Clinical Management - AAS: Recommended Sequence 2022-2023
Total Credits
64 - 67
Description
Enrollment Status: Full Time

If you have questions about the order in which you should take these courses, or the availability of these courses, please contact your advisor or the faculty contact listed below.

Program Contact Information

Office Contact: School of Health and Human Services: 313-845-9877, hhsinfo@hfcc.edu, Health Careers Education Ctr, Room: G-132

Faculty Contact: Jennifer Paducha: 313-845-6466, jlpaducha@hfcc.edu, Health Careers Education Ctr, Room: G-133B

Academic Advisor: Samer Atris: 313-317-6862, satris1@hfcc.edu, Health Careers Bldg, Room: G-203C

For students in an older version of this program, please visit Henry Ford College Catalog Archive to view required courses.

Year	Semester	Semester Credits
Year 1	Summer	8

Courses
- AH100 - Medical Terminology

Semester Credits
4
Contact Hours
62

Courses
- CAT3 - Gen Ed Applied - 2025

Semester Credits
4
Contact Hours
62

Year	Semester	Semester Credits
Year 1	Fall	13 - 16

Courses
- MOA101 - Administrative Medical Procedures I

Semester Credits
4
Contact Hours
62

Courses
- MOA110 - Processing Health Insurance Claims

Semester Credits 2
Contact Hours 47

Courses
- MOA122 - Intro to Medical Assistant Clinical Proc

Semester Credits 2
Contact Hours 47

Courses
- BIO134 - Essentials of Anatomy and Physiology
  OR
- BIO233 - Anatomy and Physiology I
- **AND** BIO234 - Anatomy and Physiology II

Semester Credits 5 - 8
Contact Hours 92 - 154

Year	Semester	Semester Credits
Year 1	Winter	11

Courses
- MOA152 - Medical Assistant Clinical Procedure II

Semester Credits 5
Contact Hours 107

Courses
- MOA170 - Med Correspond - Electronic Hlth Record

Semester Credits 3
Contact Hours 62

Courses
- PSY131 - Introductory Psychology

Semester Credits 3
Contact Hours 47

Year	Semester	Semester Credits
Year 2	Summer	4

Courses
- MOA190 - Medical Office Externship

Semester Credits 4
Contact Hours 173

Year	Semester	Semester Credits
Year 2	Fall	16

Courses
- BBA110 - Business Grammar and Punctuation

Semester Credits 3
Contact Hours 47

Courses
- BBA131 - Introduction to Business

Semester Credits 4
Contact Hours 62

Courses
- BBA133 - Business Behavior and Communication

Semester Credits 3
Contact Hours 47

Courses
- ENG131 - Introduction to College Writing

Semester Credits 3
Contact Hours 47

Courses
- HCS131 - Computers in Health Care

Semester Credits 3
Contact Hours 47

Year	Semester	Semester Credits
Year 2	Winter	12

Courses
- BBA153 - Customer Service

Semester Credits 3
Contact Hours 47

Courses
- MGT230 - Principles of Management

Semester Credits 3
Contact Hours 47

Courses
- MGT231 - Leadership and Teambuilding

Semester Credits 3
Contact Hours 47

Courses
- ENG132 - College Writing and Research
  OR
- ENG132H - Honors College Writing and Research
  OR
- ENG135 - Business & Technical Writing & Research

Semester Credits 3
Contact Hours 47

Program Requirements

Minimum Credits for Program Completion
60

Minimum GPA required for Graduation
2.000

HFC Credit Hour Residency Requirement
20

Simple Requisites

Core Course Requirements

Medical Practice - Clinical Management AAS - Core Course Requirements
Type
Completion Requirement

Complete ALL of the following Courses:
- BBA131-Intro to Business 4 credits
- BBA133-Bus Behavr & Comm 3 credits
- MOA101-Admin Medical Procedures I 4 credits
- MOA122-Intro Med Asst Clinical Proced 2 credits
- MOA152-Med Assist. Clinical Proc II 5 credits
- MOA190-Medical Office Externship 4 credits
- MGT230-Principles of Management 3 credits
- MGT231-Leadership and Teambuilding 3 credits

Support Course Requirements

Medical Practice - Clinical Management AAS - Support Course Requirements
Type
Completion Requirement

Category 1: English Composition

Complete ALL of the following Courses:
- ENG131-Introduction College Writing 3 credits

Computer Technology

Complete ALL of the following Courses:
- HCS131-Computers in Health Care 3 credits

Category 3: Mathematics

Complete MATH100 Basic Tech Mathematics or higher

Earn at least 4 credits

Category 4: Social Sciences

Complete ALL of the following Courses:
- PSY131-Introductory Psychology 3 credits

Category 2: English Composition or Communications

Complete at least 1 of the following courses:
- ENG132-College Writing and Research 3 credits
  OR ENG132H-Honors Coll Writing & Research 3 credits
  OR ENG135-Bus & Tech Writing & Research 3 credits

Category 6: Natural Sciences

Complete BIO-134 or BIO-233 and BIO-234.

Earn at least 5 credits from the following:
- BIO134-Essentials Anatomy&Physiology 5 credits
- BIO233-Anatomy and Physiology I 4 credits
  AND BIO234-Anatomy and Physiology II 4 credits

Elective Hours

Earn at least 8 credits

MUSIC.AA - Music

Program Information

Program Title
Music AA Degree

Program Code
MUSIC.AA

Degree Type
Associate in Arts

Minimum Credits for Program Completion
60

Program Eligible for Financial Aid?
Yes

Subject
Music

Semesters to Complete Program
4

Program Description
Credentials successful students for employment opportunities in music and prepares students for further study at a university level. Students desiring an Associate in Arts degree with a major in music must have music reading skills and basic piano keyboarding skills. Students lacking these skills need to complete [MUS-134: Music Fundamentals](/courses/mus-134) to develop music reading skills and [MUS-117: Piano Class](/courses/mus-117) to develop piano skills in addition to the courses listed below.

Faculty Contact
Anthony Lai

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ajlai@hfcc.edu

Faculty Contact Phone
313-845-6474

Academic Advisor
Sarah Krizan

Academic Advisor Contact Email
smkrizan@hfcc.edu

Academic Advisor Contact Phone
313-845-9889

Academic Advisor Office Location
K-248

School
Liberal Arts

Academic Department
Fine & Performing Arts

Admissions Requirements

Admissions Requirements
Students concerned about their ability to read music or piano keyboarding skills are encouraged to contact music faculty.

Program Learning Outcomes

Perform, within a historical context, on an instrument, keyboard or voice, as a soloist and in ensemble with tone, intonation, and style at the level of a second year University School of Music student.

Analyze four-part compositions in 18th-century style (e.g. chorale) in all major and minor keys.

Compose four-part compositions in 18th-century style (e.g. chorale) in all major and minor keys, applying appropriate melody, rhythm, chord progression, voicing, and phrasing.

What Classes do I take?

2-Year Plan
Music - AA: Recommended Sequence - Current
Total Credits
60
Description
Enrollment Status: Full Time

If you have questions about the order in which you should take these courses, or the availability of these courses, please contact your advisor or the faculty contact listed below.

Program Contact Information

Office Contact: School of Liberal Arts: 313-845-9624, lainfo@hfcc.edu, Liberal Arts Building, Room: K-201 and F-138

Faculty Contact: Anthony Lai: 313-845-6474, ajlai@hfcc.edu

Academic Advisor: Sarah Krizan: 313-845-9889, smkrizan@hfcc.edu, Liberal Arts Bldg, Room: K-248

For students in an older version of this program, please visit Henry Ford College Catalog Archive to view required courses.

Year	Semester	Semester Credits
Year 1	Fall	16

Courses
- MUS113 - Applied Music (1 Credit) 1

Semester Credits 1
Contact Hours 16

Courses
- MUS138 - Music Theory 1

Semester Credits 3
Contact Hours 47

Courses
- MUS141 - Aural Music Skills 1

Semester Credits 2
Contact Hours 32

Courses
- MUS107 - Chorus 1
  OR
- MUS108 - Chorus 2
  OR
- MUS207 - Chorus 3
  OR
- MUS208 - Chorus 4
  OR
- MUS109 - Symphony Band 1
  OR
- MUS110 - Symphony Band 2
  OR
- MUS209 - Symphony Band 3
  OR
- MUS210 - Symphony Band 4
  OR
- MUS111 - Jazz Band 1
  OR
- MUS112 - Jazz Band 2
  OR
- MUS211 - Jazz Band 3
  OR
- MUS212 - Jazz Band 4
  OR
- MUS143 - Vocal Jazz Ensemble 1
  OR
- MUS144 - Vocal Jazz Ensemble 2
  OR
- MUS243 - Vocal Jazz Ensemble 3
  OR
- MUS244 - Vocal Jazz Ensemble 4

Semester Credits
1
Contact Hours
47

Courses
- CAT1 - Gen Ed Transfer - 2020

Semester Credits
3
Contact Hours
47

Courses
- CAT4 - Gen Ed Transfer - 2020

Semester Credits
3
Contact Hours
47

Courses
- CAT5 - Gen Ed Transfer - 2025

Semester Credits
3
Contact Hours
47

Year	Semester	Semester Credits
Year 1	Winter	14

Courses
- MUS115 - Applied Music (1 Credit) 2

Semester Credits
1
Contact Hours
16

Courses
- MUS139 - Music Theory 2

Semester Credits
3
Contact Hours
47

Courses
- MUS142 - Aural Music Skills 2

Semester Credits
2
Contact Hours
32

Courses
- MUS107 - Chorus 1
  OR
- MUS108 - Chorus 2
  OR
- MUS207 - Chorus 3
  OR
- MUS208 - Chorus 4
  OR
- MUS109 - Symphony Band 1
  OR
- MUS110 - Symphony Band 2
  OR
- MUS209 - Symphony Band 3
  OR
- MUS210 - Symphony Band 4
  OR
- MUS111 - Jazz Band 1
  OR
- MUS112 - Jazz Band 2
  OR
- MUS211 - Jazz Band 3
  OR
- MUS212 - Jazz Band 4
  OR
- MUS143 - Vocal Jazz Ensemble 1
  OR
- MUS144 - Vocal Jazz Ensemble 2
  OR
- MUS243 - Vocal Jazz Ensemble 3
  OR
- MUS244 - Vocal Jazz Ensemble 4

Semester Credits 1
Contact Hours 47

Courses
- CAT2 - Gen Ed Transfer - 2020

Semester Credits 3
Contact Hours 47

Courses
- CAT3 - Coll Algebra - Gen Ed Transfer - 2020
  OR
- CAT3 - Quant Lit - Gen Ed Transfer - 2025
  OR
- CAT3 Stats - Gen Ed Transfer - 2025

Semester Credits 4
Contact Hours 62

Year	Semester	Semester Credits
Year 2	Fall	14

Courses
- MUS156 - Music Technology

Semester Credits 3
Contact Hours 47

Courses
- MUS213 - Applied Music (one Credit) 3

Semester Credits 1
Contact Hours 16

Courses
- MUS107 - Chorus 1
  OR
- MUS108 - Chorus 2
  OR
- MUS207 - Chorus 3
  OR
- MUS208 - Chorus 4
  OR
- MUS109 - Symphony Band 1
  OR
- MUS110 - Symphony Band 2
  OR
- MUS209 - Symphony Band 3
  OR
- MUS210 - Symphony Band 4
  OR
- MUS111 - Jazz Band 1
  OR
- MUS112 - Jazz Band 2
  OR
- MUS211 - Jazz Band 3
  OR
- MUS212 - Jazz Band 4
  OR
- MUS143 - Vocal Jazz Ensemble 1
  OR
- MUS144 - Vocal Jazz Ensemble 2
  OR
- MUS243 - Vocal Jazz Ensemble 3
  OR
- MUS244 - Vocal Jazz Ensemble 4

Semester Credits 1
Contact Hours 47

Courses
- MUS232 - History of Western Music 1
  OR
- MUS233 - History of Western Music 2

Semester Credits 3
Contact Hours 47

Courses
- CAT4 - Gen Ed Transfer - 2020

Semester Credits 3
Contact Hours 47

Courses
- CAT6 - Transfer - Lec and Lab - 2025
  OR
- CAT6 - Transfer - Lec Only - 2020
  OR
- CAT6 - Gen Ed Transfer - Lab Only - 2020

Semester Credits
3
Contact Hours
47

Year	Semester	Semester Credits
Year 2	Winter	16

Courses
- MUS118 - Piano Class 2

Semester Credits
2
Contact Hours
32

Courses
- MUS132 - Music Literature

Semester Credits
3
Contact Hours
47

Courses
- MUS215 - Applied Music (one Credit) 4

Semester Credits
1
Contact Hours
16

Courses
- MUS107 - Chorus 1
  OR
- MUS108 - Chorus 2
  OR
- MUS207 - Chorus 3
  OR
- MUS208 - Chorus 4
  OR
- MUS109 - Symphony Band 1
  OR
- MUS110 - Symphony Band 2
  OR
- MUS209 - Symphony Band 3
  OR
- MUS210 - Symphony Band 4
  OR
- MUS111 - Jazz Band 1
  OR
- MUS112 - Jazz Band 2
  OR
- MUS211 - Jazz Band 3
  OR
- MUS212 - Jazz Band 4
  OR
- MUS143 - Vocal Jazz Ensemble 1
  OR
- MUS144 - Vocal Jazz Ensemble 2
  OR
- MUS243 - Vocal Jazz Ensemble 3
  OR
- MUS244 - Vocal Jazz Ensemble 4

Semester Credits
1
Contact Hours
47

Courses
- Complete any one lab based course, from a different discipline. See General Education Requirements for details. PSCI-135 is recommended. (Generic)

Semester Credits
4
Contact Hours
62

Courses
- Music Elective: Complete five (5) additional Music (MUS) credits. (Generic)

Semester Credits
5
Contact Hours
77

Program Requirements

Minimum Credits for Program Completion
60

Minimum GPA required for Graduation
2.000

HFC Credit Hour Residency Requirement
20

Simple Requisites

Core Course Requirements

Music AA - Core Course Requirements
Type
Completion Requirement

Complete ALL of the following Courses:
- MUS118-Piano Class 2 2 credits
- MUS132-Music Literature 3 credits
- MUS138-Music Theory 1 3 credits
- MUS139-Music Theory 2 3 credits
- MUS141-Aural Music Skills 1 2 credits
- MUS142-Aural Music Skills 2 2 credits
- MUS156-Music Technology 3 credits

Music Ensemble: Complete 4 credits, in any combination, from the following ensembles

Earn at least 4 credits from the following:
- MUS107-Chorus 1 1 credits
  AND MUS108-Chorus 2 1 credits
  AND MUS207-Chorus 3 1 credits
  AND MUS208-Chorus 4 1 credits
- MUS109-Symphony Band 1 1 credits
  AND MUS110-Symphony Band 2 1 credits
  AND MUS209-Symphony Band 3 1 credits
  AND MUS210-Symphony Band 4 1 credits
- MUS111-Jazz Band 1 1 credits
  AND MUS112-Jazz Band 2 1 credits
  AND MUS211-Jazz Band 3 1 credits
  AND MUS212-Jazz Band 4 1 credits
- MUS143-Vocal Jazz Ensemble 1 1 credits
  AND MUS144-Vocal Jazz Ensemble 2 1 credits
  AND MUS243-Vocal Jazz Ensemble 3 1 credits
  AND MUS244-Vocal Jazz Ensemble 4 1 credits

Applied Music

Earn at least 4 credits from the following:
- MUS113-Applied Music (1 Credit) 1 1 credits
- MUS114-Applied Music (2 Credits)1 2 credits
- MUS115-Applied Music (1 Credit) 2 1 credits
- MUS116-Applied Music (2 Credits) 2 2 credits
- MUS213-Applied Music (one Credit) 3 1 credits
- MUS214-Applied Music (two Credits) 3 2 credits
- MUS215-Applied Music (one Credit) 4 1 credits
- MUS216-Applied Music (two Credits) 4 2 credits

Music HIstory

Complete at least 1 of the following courses:
- MUS232-History of Western Music 1 3 credits
  OR MUS233-History of Western Music 2 3 credits

Music Elective

Earn at least 5 credits

Additional Comments:
MUS117 Piano Class 1 or performance placement required as prerequisite for MUS118 Piano Class 2

General Education Requirements

Music AA - General Education Course Requirements
Type
Completion Requirement

Category 1: English Composition

Complete any one course from the General Education Requirements for Transfer Degrees (MTA) list.

Complete at least 1 courses in the following course sets:
- CAT1 - Gen Ed Transfer - 2020

Category 2: English Composition or Communications

Complete any one course from the General Education Requirements for Transfer Degrees (MTA) list.

Complete at least 1 courses in the following course sets:
- CAT2 - Gen Ed Transfer - 2020

Category 3: Mathematics

Complete any one course from the General Education Requirements for Transfer Degrees (MTA) list.

Complete at least 1 courses in the following course sets:
- CAT3 - Coll Algebra - Gen Ed Transfer - 2020
- CAT3 - Quant Lit - Gen Ed Transfer - 2025
- CAT3 Stats - Gen Ed Transfer - 2025

Category 4: Social Sciences

Complete any two, from different disciplines from the General Education Requirements for Transfer Degrees (MTA) list.

Complete at least 2 courses in the following course sets:
- CAT4 - Gen Ed Transfer - 2020

Category 5: Humanities and Fine Arts

Complete any one, from a different discipline (not MUS) from the General Education Requirements for Transfer Degrees (MTA) list.

Complete at least 2 courses in the following course sets:
- CAT5 - Gen Ed Transfer - 2025

Category 6: Natural Sciences

Complete any two, including one with laboratory experience, from different disciplines from the General Education Requirements for Transfer Degrees (MTA) list.

PSCI135 Sound & Light in Fine-Arts is recommended.

Complete at least 2 courses in the following course sets:
- CAT6 - Transfer - Lec and Lab - 2025
- CAT6 - Transfer - Lec Only - 2020
- CAT6 - Gen Ed Transfer - Lab Only - 2020

Additional Comments:
See General Education Requirements for Transfer Degrees for details.

NURSE.AAS - Nursing

Program Information

Program Title
Nursing AAS Degree

Program Code
NURSE.AAS

Degree Type
Associate in Applied Science

Minimum Credits for Program Completion
62

Program Eligible for Financial Aid?
Yes

Subject
Nursing

Semesters to Complete Program
6

Program Description
Prepares individuals to work as entry-level registered nurses. HFC is the first associate's degree nursing program in Michigan, one of seven such programs in the nation. The program has received many awards and grants for curricula design, innovative teaching strategies, creative curriculum scheduling and collaborative partnerships.

Program Accreditation Information
The Nursing Associate in Applied Science program, at Henry Ford College, East Campus, located in Dearborn, Michigan is accredited by the:

Accreditation Commission for Education in Nursing (ACEN)
3390 Peachtree Road NE, Suite 1400, Atlanta, GA 30326
Phone: (404) 975-5000
Website: www.acenursing.org

The most recent accreditation decision made by the ACEN Board of Commissioners for the Nursing Associate in Applied Science program is: Continuing Accreditation.

View the public information disclosed by the ACEN regarding this program at: http://www.acenursing.com/accreditedprograms/programsearch.htm

HFC nursing programs have full approval from the Michigan Board of Nursing.

Michigan Board of Nursing
611 W. Ottawa St.
PO Box 30670
Lansing MI, 48909
Phone: (517) 335-0918
Website: www.michigan.gov/lara/

HFC is a fully accredited member of the Higher Learning Commission.

Faculty Contact
Trina Moore

Faculty Contact Email
tmmoore13@hfcc.edu

Faculty Contact Phone
313-317-1781

Faculty Contact Office Location
SN-120A

Academic Advisor
Julie Fountain

Academic Advisor Contact Email
jafountain@hfcc.edu

Academic Advisor Contact Phone
313-317-6807

Academic Advisor Office Location
G-203B

School
Health & Human Services

Academic Department
Nursing

Admissions Requirements

Admissions Requirements
Admission is competitive. The program has a limited enrollment and admits students in the fall and winter semesters. Acceptance into the college does not constitute nor guarantee admission to the nursing program. Final approval to enroll in the program comes from the Dean/Associate Dean of the School of Health and Human Services. To be considered, applicants must satisfy the following:

1. Be admitted to Henry Ford College.
2. **GPA:** Have a cumulative grade point average of 2.70 or better in pre-requisite courses to the nursing program
3. **Appointment:** It is recommended that all prospective Nursing students schedule an appointment with one of the Student Success Navigators through the HFC Advising Office. Students who intend to apply to the Nursing program must first attend/view a virtual Intake | Nursing Information Session available through the Nursing website, Admissions tab to be completed within one year of application submission. After attending this virtual session, students must record their date of attendance as they will enter this date on their Nursing application.
4. **Application:** Submit a nursing program application with all required documentation by application deadline. Application deadline dates can be found on the nursing program website.
5. **Grades:** Complete all prerequisite, co-requisite, and support courses with a "C" grade or better. No pre-requisite, co-requisite or support courses can be repeated more than one time to receive a higher grade. GPA will be calculated by averaging the first two course attempted grades per course. "W" and "DR" grades will be counted as an attempt, therefore only leaving one attempt remaining to use for GPA.
6. **Age:** Due to clinical agencies minimal age requirements, applicants must be at least 18 years of age at the start of the nursing program.
7. **Courses Required for Program Admission:** Complete the following, with a "C" grade or better:
    - Biology: Complete:
        - BIO131 Introduction to Biology or its transfer equivalent or better or a High school grade of "A" or "B" throughout a one year laboratory Advance Placement course
        - BIO233 Anatomy and Physiology I
        - BIO234 Anatomy and Physiology II
    - Mathematics: Complete one: MATH115 College Algebra, MATH131 Math for the Modern World, MATH141 Introduction to Statistics, MATH165 Mathematics for Calculus, MATH175 Precalculus, MATH180 Calculus 1
    - Other Courses: Complete: ENG131 Introduction College Writing, PSY131 Introductory Psychology, HCS131 Computers in Health Care or CIS100 Intro Info Tech
8. **Nursing Admission Test (NAT):** Successfully complete the NAT.
    - The required Nurse Admission Test (NAT) is offered by the College and must be taken at HFC.
    - All Nat scores at time of application deadline date cannot be over 1 year old.
    - Students will be allowed 2 attempts in a 12-month period. Students who do not pass after the 2nd attempt must wait 1 year from the 2nd attempt date before being eligible to test again.
    - The Learning Lab offers free assistance to prepare for this exam.
    - The NAT requirements are:
        - Math proficiency at 80%.
        - Reading composite proficiency at 80%.
        - Grammar proficiency at 80%.
        - Vocabulary proficiency at 80%.
        - Students unsuccessful on their first test may choose in their second testing attempt to only take those subject areas where a score of 80% was not achieved in their first attempt.

Courses Required for Program Admission
BIO233 - Anatomy and Physiology I, BIO234 - Anatomy and Physiology II, ENG131 - Introduction to College Writing, PSY131 - Introductory Psychology, MATH115 - College Algebra, HCS131 - Computers in Health Care

Program Learning Outcomes

Use evidence based practices in the delivery of nursing care.

Communicate effectively with individuals, families, communities and the health care team using a variety of methods, including informatics.

Utilize the nursing process and standards of care in promotion of health and wellness and in the prevention and management of illness for individuals across the life span.

Respect the client's cultural diversity by incorporating professional nursing values of legal, ethical, and caring behaviors through lifelong learning.

Collaborate as a member of the interdisciplinary health care team to provide quality care and integrate safety that reduces harm to clients.

Integrate critical thinking and clinical decision making to make sound clinical judgments.

Advocate on behalf of the client, the family and the community, who are a source of control and full partners when producing compassionate care.

What Classes do I take?

2-Year Plan
Nursing - AAS: Recommended Sequence - Current
Total Credits
62 - 64
Description
Enrollment Status: Full Time

If you have questions about the order in which you should take these courses, or the availability of these courses, please contact your advisor or the faculty contact listed below.

Program Contact Information

Office Contact: School of Health and Human Services, Nursing Department: 313-845-6305, nursing@hfcc.edu, School of Nursing, Room: SN-120

Faculty Contact: Julie Fountain: 313-317-6807, jafountain@hfcc.edu, Health Careers Education Ctr, Room: G-203B

Academic Advisor: Julie Fountain: 313-317-6807, jafountain@hfcc.edu, Health Careers Education Ctr, Room: G-203B

For students in an older version of this program, please visit Henry Ford College Catalog Archive to view required courses.

Year	Semester	Semester Credits
Year 1	Fall	11 - 13

Courses
- BIO233 - Anatomy and Physiology I

Semester Credits 4
Contact Hours 77

Courses
- CIS100 - Introduction to Information Technology
  OR
- HCS131 - Computers in Health Care

Semester Credits 3
Contact Hours 47

Courses
- MATH115 - College Algebra
  OR
- MATH131 - Mathematics for the Modern World
  OR
- MATH141 - Introduction to Statistics
  OR
- MATH165 - Mathematics for Calculus
  OR
- MATH175 - Precalculus
  OR
- MATH180 - Calculus I

Semester Credits 4 - 6
Contact Hours 62 - 92

Courses
- Apply: Submit a nursing program application with all required documentation by application deadline. Application deadline dates can be found on the Nursing Program website. (Generic)

Semester Credits -
Contact Hours -

Courses
- Nursing Admissions Test (NAT): Complete the NAT Test in Fall 1 or Winter 1 (Generic)

Semester Credits -
Contact Hours -

Year	Semester	Semester Credits
Year 1	Winter	10

Courses
- BIO234 - Anatomy and Physiology II

Semester Credits 4
Contact Hours 77

Courses
- ENG131 - Introduction to College Writing

Semester Credits 3
Contact Hours 47

Courses
- PSY131 - Introductory Psychology

Semester Credits
3
Contact Hours
47

Courses
- Nursing Admissions Test (NAT): Complete the NAT Test in Fall 1 or Winter 1 (Generic)

Semester Credits
-
Contact Hours
-

Year	Semester	Semester Credits
Year 2	Fall	12

Courses
- NSG101 - Beginning Health & Physical Assessment

Semester Credits
2
Contact Hours
32

Courses
- NSG116 - Pharmacology for Nursing Practice

Semester Credits
4
Contact Hours
62

Courses
- NSG117 - Medical-Surgical Nursing I

Semester Credits
6
Contact Hours
152

Year	Semester	Semester Credits
Year 2	Winter	10

Courses
- NSG119 - Medical-Surgical Nursing II

Semester Credits
6
Contact Hours
152

Courses
- NSG121 - Psychiatric Mental Health Nursing

Semester Credits
4
Contact Hours
122

Year	Semester	Semester Credits
Year 3	Fall	12

Courses
- NSG202 - Medical-Surgical Nursing III

Semester Credits
6
Contact Hours
152

Courses
- NSG217 - Pediatric Nursing

Semester Credits
3
Contact Hours
77

Courses
- NSG218 - Women's Health & Maternity Care

Semester Credits
3
Contact Hours
77

Year	Semester	Semester Credits
Year 3	Winter	7

Courses
- NSG209 - Medical-Surgical Nursing IV

Semester Credits
6
Contact Hours
152

Courses
- NSG212 - Professional Transitions

Semester Credits
1
Contact Hours
16

Program Requirements

Minimum Credits for Program Completion
62

Minimum GPA required for Graduation
2.000

HFC Credit Hour Residency Requirement
20

Simple Requisites

Core Course Requirements

Nursing AAS - Core Course Requirements
Type
Completion Requirement

Complete ALL of the following Courses:
- NSG101-Begin Health &Phys Assessment 2 credits
- NSG116-Pharmacology for NSG Practice 4 credits
- NSG117-Medical-Surgical Nursing I 6 credits
- NSG119-Medical-Surgical Nursing II 6 credits
- NSG121-Psychiatric Mental Health Nurs 4 credits
- NSG202-Medical-Surgical Nursing III 6 credits
- NSG209-Medical-Surgical Nursing IV 6 credits
- NSG212-Professional Transitions 1 credits
- NSG217-Pediatric Nursing 3 credits
- NSG218-Women's Hlth & Maternity Care 3 credits

OPTECH.AAS - Ophthalmic Technician

Program Information

Program Title
Ophthalmic Technician AAS Degree

Program Code
OPTECH.AAS

Degree Type
Associate in Applied Science

Minimum Credits for Program Completion
60

Program Eligible for Financial Aid?
Yes

Subject
Ophthalmic Technician

Semesters to Complete Program
7

Program Description
Prepares individuals as entry-level Ophthalmic Technicians. The first year of the program is devoted to building a strong foundation in core technical courses and their corresponding academic support courses. Students receive a comprehensive introduction to ophthalmic technology with simulated and actual clinical equipment. During the second year, the program continues with advanced didactic conferences and studies while students begin the clinical component of the program, consisting of approximately 960 hours in a variety of diverse vision care clinical settings.

Program Accreditation Information
The Ophthalmic Technician program is accredited by the International Council of Accreditation for Allied Ophthalmic Education Programs, 2025 Woodlane Drive, St. Paul, MN 55125-2998; (651) 731-7244.

Faculty Contact	Faculty Contact Email	Faculty Contact Phone	Faculty Contact Office Location
Cynthia Scheuer	cscheuer@hfcc.edu	313-317-6575	G-132A

Academic Advisor	Academic Advisor Contact Email	Academic Advisor Contact Phone	Academic Advisor Office Location
Samer Atris	satris1@hfcc.edu	313-317-6862	G-203C

School
Health & Human Services

Academic Department
Health Careers, Education, and Human Services

Admissions Requirements

Admissions Requirements
Students who meet all admission requirements are considered qualified and are admitted to the program once per year in the fall semester on a "first-qualified, first-admitted" basis. Acceptance into the college does not constitute nor guarantee admission to the program. Final approval to enroll in the program comes from the Ophthalmic Technician AAS Degree Program Director.

Program Admission Requirements

1. College GPA of at least 2.60 or higher for a minimum of 12 academic credits, excluding lower than 100-level courses.
2. Complete one of the following:
   - Accuplacer Next Gen 255+ Reading score OR
   - ENG131 Introduction College Writing, ENG131A Intro College Writing (ALP), or ENG131H Honors Intro College Writing with B- or better
3. Complete one of the following:
   - BIO134 Essentials Anatomy&Physiology with a C or better OR
   - BIO233 Anatomy and Physiology I and BIO234 Anatomy and Physiology II or college equivalent with a C or better.
4. Complete MATH100 Basic Tech Mathematics or higher with a C or better.

The Program Admission Process

Our Health Career programs are limited enrollment programs with specific admission requirements. In order to get on the qualified list, you must complete the Health Careers Ophthalmic Technician (OPT) application found at the Health Careers Admissions Process site and all the OPT admission requirements. It is recommended that students interested in a health career meet with the Health Careers Student Success Navigator located in the Welcome Center Advising area. Make an appointment with the Health Careers Student Success Navigator early in your planning process. This will allow you to discuss program options and create an academic plan to qualify for the selected program.

Due to the number of credit hours required for program completion and the intensity of the program, students are encouraged to complete as many of the Required Support Courses as possible prior to entering the program. The first courses that a student should complete are those required for program admission followed by the other Required Support Courses.

Additional Program Requirements

Prior to starting the program:

- Applicants must attend informational and orientation meetings scheduled by program director for Ophthalmic Technician Program.
- Within two months of beginning second year clinical rotations, students must provide a current American Heart Association, Basic Life Support for Healthcare Provider certification (AHA, BLS Healthcare Provider) valid through remainder of program. This may be completed by taking AH105 Basic Life Support Healthcare

Program Supplies

- Students will be required to purchase clinical uniforms and supplies including electronic devices (i.e. iPod Touch) for electronic clinical documentation. Do not purchase in advance. Specific directions will be given during orientation meeting.

Program Deposit

- At the time of formal admission to the program, each applicant is required to pay a $100 fee to secure a place in the program. This fee is refunded only if the student is still active in the program October 15 of Fall Term 1.

Health Appraisal

Students in the OPT program are expected to meet the same physical and mental health requirements as an ophthalmic technician.

A representative OPT Job Profile listing these requirements as well as environmental conditions of this occupation is available through the Health Careers Office.

Final acceptance and continuation in the OPT program is contingent upon fulfilling and maintaining minimum program requirements and proof of the following by specified deadline dates:

- Physical examination (must meet job profile requirements as determined by a physician and validated on health form)
- Required titers from previous immunizations and needed immunizations from titer results, if necessary. Evidence of titers must be provided by submission of current lab copies
- Tuberculosis screening
- Vaccinations as required by health care community, including flu vaccine
- Health insurance coverage throughout clinical externship portion of the program

Criminal Background Check and Drug Screen

Consistent with Section 20173 of the Michigan Public Health Code and the requirements of our clinical affiliates, a Criminal Background Check and Drug screen clearance (on first test) are required for all students in the OPT program prior to beginning clinical assignments. The cost for this test is in addition to the basic tuition and fee schedule. Students who are not cleared for clinical through the health appraisal, criminal background check, and have not passed the drug screen on the first test will not be able to complete the OPT program.

Courses Required for Program Admission
BIO134 - Essentials of Anatomy and Physiology, BIO233 - Anatomy and Physiology I, BIO234 - Anatomy and Physiology II

Program Learning Outcomes

Perform technician-level tasks safely and accurately defined by national certification and accreditation standards.

Communicate and collaborate effectively as part of an interdisciplinary health care team.

Model professional and ethical behaviors in the healthcare environment.

Performs administrative duties of an ophthalmic technician.

Calibrate and maintain ophthalmic equipment and instrumentation.

Evaluate eye movements and binocular functions.

Measure visual acuity and visual fields.

Perform surgical scrub, change gloves and gown, and monitor sterile field during minor and major eye surgery to meet professional standards.

Perform ocular imaging procedures.

What Classes do I take?

2-Year Plan
Ophthalmic Technician - AAS: Recommended Sequence - Current
Total Credits
61 - 65
Description
Enrollment Status: Full Time

If you have questions about the order in which you should take these courses, or the availability of these courses, please contact your advisor or the faculty contact listed below.

Program Contact Information

Office Contact: School of Health and Human Services: 313-845-9877, hhsinfo@hfcc.edu, Health Careers Education Ctr, Room: G-132

Faculty Contact: Kathy Campbell: 313-317-1720, kacampbell4@hfcc.edu, Health Careers Education Ctr, Room: G-133G

Academic Advisor: Samer Atris: 313-317-6862, satris1@hfcc.edu, Health Careers Bldg, Room: G-203C

For students in an older version of this program, please visit Henry Ford College Catalog Archive to view required courses.

Year	Semester	Semester Credits
Year 1	Winter	5 - 8

Courses
- BIO134 - Essentials of Anatomy and Physiology
  OR
- BIO233 - Anatomy and Physiology I
- **AND** BIO234 - Anatomy and Physiology II

Semester Credits 5 - 8
Contact Hours 92 - 154

Year	Semester	Semester Credits
Year 1	Fall	13 - 14

Courses
- AH132 - Introduction to Healthcare Professions

Semester Credits 3
Contact Hours 62

Courses
- OPT101 - Introduction to Ophthalmic Technology

Semester Credits 3
Contact Hours 47

Courses
- OPT134 - Ocular Anatomy and Pathology

Semester Credits 3
Contact Hours 47

Courses
- BIO135 - Microbiology for Allied Health Sciences
  OR
- BIO251 - Microbiology

Semester Credits 4 - 5
Contact Hours 77 - 122

Year	Semester	Semester Credits
Year 2	Winter	13

Courses
- ENG131 - Introduction to College Writing

Semester Credits 3
Contact Hours 47

Courses
- OPT150 - Applied Ophthalmic Optics

Semester Credits 3
Contact Hours 47

Courses
- OPT161 - Ocular Measurements

Semester Credits 4
Contact Hours 77

Courses
- HCS131 - Computers in Health Care

Semester Credits
3
Contact Hours
47

Year	Semester	Semester Credits
Year 2	Summer	5

Courses
- OPT180 - Ocular Measurements II

Semester Credits
5
Contact Hours
77

Year	Semester	Semester Credits
Year 2	Fall	9

Courses
- HCS124 - Basic Health Assessment

Semester Credits
1
Contact Hours
16

Courses
- OPT202 - Optical Clinical Procedures

Semester Credits
4
Contact Hours
77

Courses
- OPT290 - Clinical Externship I

Semester Credits
4
Contact Hours
240

Year	Semester	Semester Credits
Year 3	Winter	13

Courses
- OPT220 - Ophthalmic Photography

Semester Credits
2
Contact Hours
32

Courses
- OPT250 - Ophthalmic Surgical Assisting Curr Issue

Semester Credits
2
Contact Hours
32

Courses
- OPT293 - Clinical Externship II

Semester Credits
6
Contact Hours
360

Courses
- PSY131 - Introductory Psychology

Semester Credits
3
Contact Hours
47

Year	Semester	Semester Credits
Year 3	Summer	3

Courses
- OPT295 - Ophthalmic Externship III

Semester Credits
3
Contact Hours
168

2-Year Plan
Ophthalmic Technician - AAS: Recommended Sequence - 2022-2023
Total Credits
63 - 67
Description
Enrollment Status: Full Time

If you have questions about the order in which you should take these courses, or the availability of these courses, please contact your advisor or the faculty contact listed below.

Program Contact Information

Office Contact: School of Health and Human Services: 313-845-9877, hhsinfo@hfcc.edu, Health Careers Education Ctr, Room: G-132

Faculty Contact: Kathy Campbell: 313-317-1720, kacampbell4@hfcc.edu, Health Careers Education Ctr, Room: G-133G

For students in an older version of this program, please visit Henry Ford College Catalog Archive to view required courses.

Year	Semester	Semester Credits
Year 1	Winter	5 - 8

Courses
- BIO134 - Essentials of Anatomy and Physiology
  OR
- BIO233 - Anatomy and Physiology I
- **AND** BIO234 - Anatomy and Physiology II

Semester Credits 5 - 8
Contact Hours 92 - 154

Year	Semester	Semester Credits
Year 1	Fall	14 - 15

Courses
- AH100 - Medical Terminology

Semester Credits 4
Contact Hours 62

Courses
- OPT101 - Introduction to Ophthalmic Technology

Semester Credits 3
Contact Hours 47

Courses
- OPT134 - Ocular Anatomy and Pathology

Semester Credits 3
Contact Hours 47

Courses
- BIO135 - Microbiology for Allied Health Sciences
  OR
- BIO251 - Microbiology

Semester Credits 4 - 5
Contact Hours 77 - 122

Year	Semester	Semester Credits
Year 2	Winter	14

Courses
- ENG131 - Introduction to College Writing

Semester Credits 3
Contact Hours 47

Courses
- OPT150 - Applied Ophthalmic Optics

Semester Credits 3
Contact Hours 47

Courses
- OPT160 - Ocular Measurements I

Semester Credits 5
Contact Hours 77

Courses
- HCS131 - Computers in Health Care

Semester Credits 3
Contact Hours 47

Year	Semester	Semester Credits
Year 2	Summer	5

Courses
- OPT180 - Ocular Measurements II

Semester Credits 5
Contact Hours 77

Year	Semester	Semester Credits
Year 2	Fall	9

Courses
- HCS124 - Basic Health Assessment

Semester Credits 1
Contact Hours 16

Courses
- OPT202 - Optical Clinical Procedures

Semester Credits 4
Contact Hours 77

Courses
- OPT290 - Clinical Externship I

Semester Credits 4
Contact Hours 240

Year	Semester	Semester Credits
Year 3	Winter	13

Courses
- OPT220 - Ophthalmic Photography

Semester Credits 2
Contact Hours 32

Courses
- OPT250 - Ophthalmic Surgical Assisting Curr Issue

Semester Credits 2
Contact Hours 32

Courses
- OPT293 - Clinical Externship II

Semester Credits 6
Contact Hours 360

Courses
- PSY131 - Introductory Psychology

Semester Credits
3
Contact Hours
47

Year	Semester	Semester Credits
Year 3	Summer	3

Courses
- OPT295 - Ophthalmic Externship III

Semester Credits
3
Contact Hours
168

Program Requirements

Minimum Credits for Program Completion
60

Minimum GPA required for Graduation
2.000

HFC Credit Hour Residency Requirement
20

Simple Requisites

Core Course Requirements

Ophthalmic Technician AAS - Core Course Requirements
Type
Completion Requirement

All OPT courses must be successfully completed within three consecutive calendar years and may be repeated only once. A minimum of a C grade is required for all courses in this program.

Complete ALL of the following Courses:
- OPT101-Intro to Ophthalmic Technology 3 credits
- OPT134-Ocular Anatomy and Pathology 3 credits
- OPT150-Applied Ophthalmic Optics 3 credits
- OPT161-Ocular Measurements 4 credits
- OPT180-Ocular Measurements II 5 credits
- OPT202-Optical Clinical Procedures 4 credits
- OPT220-Ophthalmic Photography 2 credits
- OPT250-Ophthal Surg Asst & Curr Issue 2 credits
- OPT290-Clinical Externship I 4 credits
- OPT293-Clinical Externship II 6 credits
- OPT295-Ophthalmic Externship III 3 credits

Support Course Requirements

Ophthalmic Technician AAS - Support Course Requirements
Type
Completion Requirement

Complete ALL of the following Courses:
- AH132-Intro to Healthcare Profession 3 credits
- PSY131-Introductory Psychology 3 credits
- ENG131-Introduction College Writing 3 credits
- HCS131-Computers in Health Care 3 credits

Microbiology

Complete at least 1 of the following courses:
- BIO135-Microbiology for AHS 4 credits
  OR BIO251-Microbiology 5 credits

Additional Comments:
See General Education Requirements for Applied Degrees for details.

PARALEGAL.AB - Paralegal Studies

Program Information

Program Title
Paralegal Studies AB Degree

Program Code
PARALEGAL.AB

Degree Type
Associate in Business

Minimum Credits for Program Completion
60

Program Eligible for Financial Aid?
Yes

Subject
Paralegal

Semesters to Complete Program
4

Program Description
Offers students a solid foundation of core legal knowledge and essential skills necessary for a career in the legal profession. A paralegal is employed by a law office, business, or government agency, and performs specifically delegated substantive legal work for which a lawyer is responsible. Graduates may enter the workforce as a paralegal or continue their education by transferring to a four-year baccalaureate-degree institution. Paralegals must work under the supervision of an attorney. Paralegals are not lawyers and are not permitted to provide legal services directly to the public except as permitted by law.

The Paralegal Program at Henry Ford College is approved by the American Bar Association.

Faculty Contact
Naser Abumustafa

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niabumustafa@hfcc.edu

Faculty Contact Phone
313-845-9670

Faculty Contact Office Location
E-211B

Academic Advisor
Ashlei Chears

Academic Advisor Contact Email
achears@hfcc.edu

Academic Advisor Contact Phone
313-845-6486

Academic Advisor Office Location
E-211H

School
Business, Entrepreneurship, PD

Academic Department
Business & Economics

Admissions Requirements

Admissions Requirements
The Paralegal Studies AB Degree Program at Henry Ford College welcomes transfer students from institutions of higher education. There are no minimal transfer credit requirements. Students may transfer in a maximum of 40 semester credit hours in accordance with Henry Ford College's policy. Of those, students may transfer in a maximum of 12 legal specialty semester credit hours, of which at least 4 must have been earned through traditional classroom instruction. The transfer credits from legal specialty courses must be approved by the Director of the Paralegal Studies AB Degree Program to ensure that the credit is classified as legal specialty and meets the course objectives of the course for which credit is being awarded. Legal specialty courses are defined as: (1) cover substantive law or legal procedures or processes, (2) have been developed for paralegals, and (3) emphasize practical paralegal skills.

Additional requirements for approval of transfer legal specialty credits are:

1. The course must be considered college-level.
2. Only courses in which the student has received a grade of 2.0 ("C") or higher may transfer.
3. Official transcripts must be sent directly from the student's previous college to HFC.

Program Learning Outcomes

Demonstrate knowledge and understanding of substantive law in one or more areas of practice.

Prepare legal documents using proper legal reasoning and analysis of issues, facts and law.

Use critical thinking skills and legal research skills to solve legal problems and make well-reasoned legal and ethical decisions.

Articulate the structure of the legal system and the paralegals duties and responsibilities for the delivery of legal services within that system.

Critically analyze and resolve legal problems and communicate these results in a clear and effective manner, both orally and in writing

Demonstrate the computer, time management, organizational, and communication skills necessary to work professionally and efficiently in a legal environment.

What Classes do I take?

2-Year Plan
Paralegal Studies - AB: Recommended Sequence - Current
Total Credits
58 - 61
Description
Enrollment Status: Full Time

If you have questions about the order in which you should take these courses, or the availability of these courses, please contact your advisor or the faculty contact listed below.

Program Contact Information

Office Contact: School of Business, Entrepreneurship, and Professional Development: 313-845-9645, bepdinfo@hfcc.edu, Technology Bldg, Room: E-211

Faculty Contact: Naser Abumustafa: 313-845-9670, niabumustafa@hfcc.edu, Technology Bldg, Room: E-211B

Academic Advisor: Ashlei Chears: 313-845-6486, achears@hfcc.edu, Technology Bldg, Room: E-211H

For students in an older version of this program, please visit Henry Ford College Catalog Archive to view required courses.

Year	Semester	Semester Credits
Year 1	Fall	14

Courses
- LGL100 - Essential Paralegal Skills

Semester Credits 2
Contact Hours 32

Courses
- LGL110 - Legal Ethics

Semester Credits
2
Contact Hours
32

Courses
- LGL126 - Legal Research

Semester Credits
4
Contact Hours
62

Courses
- ENG131 - Introduction to College Writing

Semester Credits
3
Contact Hours
47

Courses
- CIS100 - Introduction to Information Technology

Semester Credits
3
Contact Hours
47

Year	Semester	Semester Credits
Year 1	Winter	14

Courses
- LGL200 - Civil Litigation

Semester Credits
4
Contact Hours
62

Courses
- LGL226 - Legal Writing

Semester Credits
4
Contact Hours
62

Courses
- BBA110 - Business Grammar and Punctuation

Semester Credits
3
Contact Hours
47

Courses
- ENG132 - College Writing and Research

Semester Credits
3
Contact Hours
47

Year	Semester	Semester Credits
Year 2	Fall	11 - 13

Courses
- BLW253 - Business Law and the Legal Environment

Semester Credits
4
Contact Hours
62

Courses
- LGL115 - Property Law

Semester Credits
3
Contact Hours
47

Courses
- LGL235 - Contracts

Semester Credits
3
Contact Hours
47

Courses
- LGL190 - Co-Op in Paralegal Studies
  OR
- LGL220 - Personal Injury Litigation
  OR
- LGL228 - Technology in the Law
  OR
- LGL240 - Family Law
  OR
- LGL248 - Immigration Basics
  OR
- LGL290 - Co-Op in Paralegal Studies
  OR
- LGL295 - Paralegal Internship
  OR
- LGL299 - Special Topics in Law

Semester Credits
1 - 3
Contact Hours
3 - 150

Year	Semester	Semester Credits
Year 2	Winter	19 - 20

Courses
- SPC131 - Intro to Public Speaking

Semester Credits 3
Contact Hours 47

Courses
- LGL190 - Co-Op in Paralegal Studies
  OR
- LGL245 - Estate Planning and Probate
  OR
- LGL250 - Business Organizations
  OR
- LGL290 - Co-Op in Paralegal Studies
  OR
- LGL295 - Paralegal Internship
  OR
- LGL299 - Special Topics in Law
  OR
- Paralegal: Complete six credits (Generic)

Semester Credits 6
Contact Hours 94

Courses
- MATH115 - College Algebra
  OR
- MATH131 - Mathematics for the Modern World
  OR
- MATH141 - Introduction to Statistics
  OR
- MATH175 - Precalculus
  OR
- MATH180 - Calculus I
  OR
- MATH183 - Calculus II
  OR
- MATH280 - Calculus III

Semester Credits 4 - 5
Contact Hours 62 - 77

Courses
- CAT4 - Gen Ed Transfer - 2020

Semester Credits 6
Contact Hours 94

2-Year Plan
Paralegal Studies - AB: Recommended Sequence - 2022-2023
Total Credits
55 - 58
Description
Enrollment Status: Full Time

If you have questions about the order in which you should take these courses, or the availability of these courses, please contact your advisor or the faculty contact listed below.

Program Contact Information

Office Contact: School of Business, Entrepreneurship, and Professional Development: 313-845-9645, bepdinfo@hfcc.edu, Technology Bldg, Room: E-211

Faculty Contact: Naser Abumustafa: 313-845-9670, niabumustafa@hfcc.edu, Technology Bldg, Room: E-211B

Academic Advisor: Ashlei Chears: 313-845-6486, achears@hfcc.edu, Technology Bldg, Room: E-211H

For students in an older version of this program, please visit Henry Ford College Catalog Archive to view required courses.

Year	Semester	Semester Credits
Year 1	Fall	14

Courses
- LGL100 - Essential Paralegal Skills

Semester Credits 2
Contact Hours 32

Courses
- LGL110 - Legal Ethics

Semester Credits 2
Contact Hours 32

Courses
- LGL126 - Legal Research

Semester Credits 4
Contact Hours 62

Courses
- ENG131 - Introduction to College Writing

Semester Credits 3
Contact Hours 47

Courses
- CIS100 - Introduction to Information Technology

Semester Credits 3
Contact Hours 47

Year	Semester	Semester Credits
Year 1	Winter	14

Courses
- LGL200 - Civil Litigation

Semester Credits 4
Contact Hours 62

Courses
- LGL226 - Legal Writing

Semester Credits
4
Contact Hours
62

Courses
- BBA110 - Business Grammar and Punctuation

Semester Credits
3
Contact Hours
47

Courses
- ENG132 - College Writing and Research

Semester Credits
3
Contact Hours
47

Year	Semester	Semester Credits
Year 2	Fall	11 - 13

Courses
- BLW253 - Business Law and the Legal Environment

Semester Credits
4
Contact Hours
62

Courses
- LGL115 - Property Law

Semester Credits
3
Contact Hours
47

Courses
- LGL235 - Contracts

Semester Credits
3
Contact Hours
47

Courses
- LGL190 - Co-Op in Paralegal Studies
  OR
- LGL220 - Personal Injury Litigation
  OR
- LGL228 - Technology in the Law
  OR
- LGL248 - Immigration Basics
  OR
- LGL290 - Co-Op in Paralegal Studies
  OR
- LGL295 - Paralegal Internship
  OR
- LGL299 - Special Topics in Law

Semester Credits
1 - 3
Contact Hours
3 - 150

Year	Semester	Semester Credits
Year 2	Winter	16 - 17

Courses
- SPC131 - Intro to Public Speaking

Semester Credits
3
Contact Hours
47

Courses
- LGL190 - Co-Op in Paralegal Studies
  OR
- LGL240 - Family Law
  OR
- LGL245 - Estate Planning and Probate
  OR
- LGL250 - Business Organizations
  OR
- LGL290 - Co-Op in Paralegal Studies
  OR
- LGL295 - Paralegal Internship
  OR
- LGL299 - Special Topics in Law
  OR
- Paralegal: Complete three credits (Generic)

Semester Credits
3
Contact Hours
47

Courses
- MATH115 - College Algebra
  OR
- MATH131 - Mathematics for the Modern World
  OR
- MATH141 - Introduction to Statistics
  OR
- MATH175 - Precalculus
  OR
- MATH180 - Calculus I
  OR
- MATH183 - Calculus II
  OR
- MATH280 - Calculus III

Semester Credits	4 - 5
Contact Hours	62 - 77

Courses
- CAT4 - Gen Ed Transfer - 2020

Semester Credits	6
Contact Hours	94

Program Requirements

Minimum Credits for Program Completion	Minimum GPA required for Graduation	HFC Credit Hour Residency Requirement
60	2.000	20

Simple Requisites

Core Course Requirements

Paralegal Studies AB - Core Course Requirements
Type
Completion Requirement

Complete ALL of the following Courses:
- BLW253-Business Law & Legal Environme 4 credits
- LGL100-Essential Paralegal Skills 2 credits
- LGL110-Legal Ethics 2 credits
- LGL115-Property Law 3 credits
- LGL126-Legal Research 4 credits
- LGL200-Civil Litigation 4 credits
- LGL226-Legal Writing 4 credits
- LGL235-Contracts 3 credits

Paralegal

Complete at least 3 of the following courses:
- **OR** LGL220-Personal Injury Litigation 3 credits
  OR LGL228-Technology in the Law 3 credits
  OR LGL240-Family Law 3 credits
  OR LGL245-Estate Planning and Probate 3 credits
  OR LGL248-Immigration Basics 3 credits
  OR LGL250-Business Organizations 3 credits
  OR LGL290-Co-Op in Paralegal Studies 2 credits
  OR LGL295-Paralegal Internship 3 credits
  OR LGL299-Special Topics in Law 3 credits

Category 3: Mathematics

Complete at least 1 of the following courses:
- MATH115-College Algebra 5 credits
  OR MATH131-Math for the Modern World 4 credits
  OR MATH141-Introduction to Statistics 4 credits
  OR
  OR MATH175-Precalculus 5 credits
  OR MATH180-Calculus 1 5 credits
  OR MATH183-Calculus II 5 credits
  OR MATH280-Calculus III 5 credits

Support Course Requirements

Paralegal Studies AB - Support Course Requirements
Type
Completion Requirement

Complete ALL of the following Courses:
- BBA110-Business Grammar & Punctuation 3 credits
- CIS100-Intro Info Tech 3 credits
- ENG131-Introduction College Writing 3 credits
- ENG132-College Writing and Research 3 credits
- SPC131-Introduction Public Speaking 3 credits

General Education Requirements

Paralegal Studies AB - General Education Course Requirements
Type
Completion Requirement

Category 4: Social Sciences

Complete any two, from different disciplines.

Complete at least 2 courses in the following course sets:
- CAT4 - Gen Ed Transfer - 2020

Additional Comments:
See General Education Requirements for Transfer Degrees for details.

PARALEGAL.CA - Paralegal Studies

Program Information

Program Title
Paralegal Studies Certificate

Program Code
PARALEGAL.CA

Degree Type
Certificate of Achievement

Minimum Credits for Program Completion
25

Program Eligible for Financial Aid?
Yes

Subject
Paralegal

Semesters to Complete Program
3

Program Description
Provides students who have earned an Associate's or Bachelor's degree with a solid foundation of core legal knowledge and essential skills necessary for a career in the legal profession. A paralegal is employed by a law office, business, or government agency and performs specifically delegated substantive legal work for which a lawyer is responsible. Paralegals are not lawyers and are not permitted to provide legal services directly to the public except as permitted by law. Paralegals must work under the supervision of an attorney.

Faculty Contact
Naser Abumustafa

Faculty Contact Email
niabumustafa@hfcc.edu

Faculty Contact Phone
313-845-9670

Faculty Contact Office Location
E-211B

Academic Advisor
Ashlei Chears

Academic Advisor Contact Email
achears@hfcc.edu

Academic Advisor Contact Phone
313-845-6486

Academic Advisor Office Location
E-211H

School
Business, Entrepreneurship, PD

Academic Department
Business & Economics

Admissions Requirements

Admissions Requirements
Students must have already successfully completed an A.A., A.B., A.S., or Bachelor's degree, from a regionally accredited institution. A four-year degree is highly recommended. Students following this curriculum must have proof of their A.A., A.B., A.S., or Bachelor's degree on file and entered on their official Henry Ford College transcript before beginning this curriculum.

Program Learning Outcomes

Prepare legal documents using proper legal reasoning and analysis of issues, facts, and law.

Use critical thinking skills and legal research skills to solve legal problems and make well-reasoned legal and ethical decisions.

Articulate the structure of the legal system and the paralegals duties and responsibilities for the delivery of legal services within that system.

Critically analyze and resolve legal problems; and communicate these results in a clear and effective manner, both orally and in writing.

Demonstrate the computer, time-management, organizational, and communication skills necessary to work professionally and efficiently in a legal environment.

What Classes do I take?

2-Year Plan
Paralegal Studies - CA: Recommended Sequence - Current
Total Credits
23 - 25
Description
If you have questions about the order in which you should take these courses, or the availability of these courses, please contact your advisor or the faculty contact listed below.

Program Contact Information

Office Contact: School of Business, Entrepreneurship, and Professional Development: 313-845-9645, bepdinfo@hfcc.edu, Technology Bldg, Room: E-211

Faculty Contact: Naser Abumustafa: 313-845-9670, niabumustafa@hfcc.edu, Technology Bldg, Room: E-211B

Academic Advisor: Ashlei Chears: 313-845-6486, achears@hfcc.edu, Technology Bldg, Room: E-211H

For students in an older version of this program, please visit Henry Ford College Catalog Archive to view required courses.

Year	Semester	Semester Credits
Year 1	Fall	8

Courses
- LGL100 - Essential Paralegal Skills

Semester Credits
2
Contact Hours
32

Courses
- LGL110 - Legal Ethics

Semester Credits
2
Contact Hours
32

Courses
- LGL126 - Legal Research

Semester Credits
4
Contact Hours
62

Year	Semester	Semester Credits
Year 1	Winter	8

Courses
- LGL200 - Civil Litigation

Semester Credits 4
Contact Hours 62

Courses
- LGL226 - Legal Writing

Semester Credits 4
Contact Hours 62

Year	Semester	Semester Credits
Year 2	Fall	7 - 9

Courses
- LGL115 - Property Law

Semester Credits 3
Contact Hours 47

Courses
- LGL235 - Contracts

Semester Credits 3
Contact Hours 47

Courses
- LGL190 - Co-Op in Paralegal Studies
  OR
- LGL220 - Personal Injury Litigation
  OR
- LGL228 - Technology in the Law
  OR
- LGL248 - Immigration Basics
  OR
- LGL290 - Co-Op in Paralegal Studies
  OR
- LGL295 - Paralegal Internship
  OR
- LGL299 - Special Topics in Law
  OR
- Paralegal: Complete three credits (Generic)

Semester Credits 1 - 3
Contact Hours 3 - 150

Program Requirements

Minimum Credits for Program Completion
25

Minimum GPA required for Graduation
2.000

HFC Credit Hour Residency Requirement
20

Simple Requisites

Core Course Requirements

Paralegal Studies CA - Core Course Requirements
Type
Completion Requirement

Complete ALL of the following Courses:
- LGL100-Essential Paralegal Skills 2 credits
- LGL110-Legal Ethics 2 credits
- LGL115-Property Law 3 credits
- LGL126-Legal Research 4 credits
- LGL200-Civil Litigation 4 credits
- LGL226-Legal Writing 4 credits
- LGL235-Contracts 3 credits

Support Course Requirements

Paralegal Studies CA - Support Course Requirements
Type
Completion Requirement

Paralegal

Earn at least 3 credits from the following:
- LGL190-Co-Op in Paralegal Studies 1 credits
  OR LGL220-Personal Injury Litigation 3 credits
  OR LGL228-Technology in the Law 3 credits
  OR LGL240-Family Law 3 credits
  OR LGL245-Estate Planning and Probate 3 credits
  OR LGL248-Immigration Basics 3 credits
  OR LGL250-Business Organizations 3 credits
  OR LGL290-Co-Op in Paralegal Studies 2 credits
  OR LGL295-Paralegal Internship 3 credits
  OR LGL299-Special Topics in Law 3 credits

PELED.AA - Pre-Elementary Education

Program Information

Program Title
Pre-Elementary Education AA Degree

Program Code
PELED.AA

Degree Type
Associate in Arts

Minimum Credits for Program Completion
60

Program Eligible for Financial Aid?
Yes

Subject
Pre-Education

Semesters to Complete Program
4

Program Description
Designed for students seeking teacher certification in Elementary Education. This degree focuses on teaching children in grades K-8. Upon completion of this program students are eligible for work in various education and child care professions, however, transfer to and completion of a four-year university teacher preparation program is necessary for full teacher certification. When following university articulation guides, graduates pursuing a bachelor s degree should be able to transfer all of the required and elective coursework toward that degree.

Faculty Contact
Carolyn Casale

Faculty Contact Email
ccasale@hfcc.edu

Faculty Contact Phone
313-317-6580

Faculty Contact Office Location
G-133D

Academic Advisor
Hannah Doederlein

Academic Advisor Contact Email
hrdoederlein@hfcc.edu

Academic Advisor Contact Phone
313-317-6868

Academic Advisor Office Location
G-203A

School
Health & Human Services

Academic Department
Health Careers, Education, and Human Services

Admissions Requirements

Admissions Requirements
The law requires new teachers, school administrators, school psychologists, and other personnel to provide documentation of a completed criminal record check. Students who complete field experiences as part of their HFC coursework must provide a statewide criminal record check prior to working with children in public or non-public schools.

Program Learning Outcomes

Apply current educational theories and practices to a classroom setting.

Apply humanities concepts within the pre-kindergarten through middle school classroom.

Apply knowledge of the physical, emotional, intellectual, and social development theories of the learner in a school setting.

Apply knowledge of the exceptionalities, learning environments, and laws as they relate to special education programs.

Develop lesson plans implementing educational software for grades PK-6.

Analyze elementary and middle school mathematics at the level necessary for teaching.

Construct scientific knowledge using inquiry-based techniques.

What Classes do I take?

2-Year Plan
Pre-Elementary Education: Recommended Sequence 2023-2024
Total Credits
59
Description
Enrollment Status: Full Time

If you have questions about the order in which you should take these courses, or the availability of these courses, please contact your advisor or the faculty contact listed below.

Program Contact Information

Office Contact: School of Health and Human Services: 313-845-9877, hhsinfo@hfcc.edu, Health Careers Education Ctr, Room: G-132

Faculty Contact: Carolyn Casale: 313-317-6580, ccasale@hfcc.edu, Health Careers Education Ctr, Room: G-133D

Academic Advisor: Hannah Doederlein: 313-317-6868, hrdoederlein@hfcc.edu, Health Careers Bldg, Room: G-203A

For archived program sequences from past catalog years, please visit: Henry Ford College Catalog Archive

Year	Semester	Semester Credits
Year 1	Fall	12

Courses
- CIS221 - Instructional Tech Educators (Pre K-12)

Semester Credits
3
Contact Hours
47

Courses
- ENG131 - Introduction to College Writing

Semester Credits
3
Contact Hours
47

Courses
- MATH 121 (inactive) (Generic)

Semester Credits 3
Contact Hours 62

Courses
- PSY131 - Introductory Psychology

Semester Credits 3
Contact Hours 47

Year	Semester	Semester Credits
Year 1	Winter	13

Courses
- EDU250 - Humanities & Performing Arts Educators

Semester Credits 3
Contact Hours 47

Courses
- ENG132 - College Writing and Research

Semester Credits 3
Contact Hours 47

Courses
- GEOG132 - World Regional Geography

Semester Credits 3
Contact Hours 47

Courses
- MATH222 - Mathematics for Elementary Teachers II

Semester Credits 4
Contact Hours 77

Year	Semester	Semester Credits
Year 2	Fall	13

Courses
- EDU256 - Educational Psychology

Semester Credits 3
Contact Hours 47

Courses
- EDU296 - Exceptional Child

Semester Credits 3
Contact Hours 47

Courses
- ENG246 - Introduction to Children's Literature

Semester Credits 3
Contact Hours 47

Courses
- SCI212 - Earth Science for Educators
  OR
- SCI213 - Learning By Inquiry: Life Science

Semester Credits 4
Contact Hours 62

Year	Semester	Semester Credits
Year 2	Winter	21

Courses
- EDU 201 (inactive) (Generic)

Semester Credits 3
Contact Hours 47

Courses
- EDU 202 (inactive) (Generic)

Semester Credits 1
Contact Hours 16

Courses
- EDU260 - History in Elementary Schools

Semester Credits 3
Contact Hours 47

Courses
- Category 6: Natural Sciences This is an additional Natural Science requirement for this program. There is flexibility in your decision depending on the university you are transferring to. Please speak with your Pre-Education Academic Advisor. (Generic)
  OR
- CAT6 - Transfer - Lec and Lab - 2025
  OR
- CAT6 - Transfer - Lec Only - 2020
  OR
- CAT6 - Gen Ed Transfer - Lab Only - 2020

Semester Credits 4
Contact Hours 62

Courses
- Electives: Consult your academic advisor, or transfer institution for recommended electives. (Generic)

Semester Credits 10
Contact Hours 160

2-Year Plan
Pre-Elementary Education: Recommended Sequence - Current
Total Credits
60

Description
Enrollment Status: Full Time

If you have questions about the order in which you should take these courses, or the availability of these courses, please contact your advisor or the faculty contact listed below.

Program Contact Information

Office Contact: School of Health and Human Services: 313-845-9877, hhsinfo@hfcc.edu, Health Careers Education Ctr, Room: G-132

Faculty Contact: Carolyn Casale: 313-317-6580, ccasale@hfcc.edu, Health Careers Education Ctr, Room: G-133D

Academic Advisor: Hannah Doederlein: 313-317-6868, hrdoederlein@hfcc.edu, Health Careers Bldg, Room: G-203A

For students in an older version of this program, please visit Henry Ford College Catalog Archive to view required courses.

Year	Semester	Semester Credits
Year 1	Fall	13

Courses
- CIS221 - Instructional Tech Educators (Pre K-12)

Semester Credits
3
Contact Hours
47

Courses
- ENG131 - Introduction to College Writing

Semester Credits
3
Contact Hours
47

Courses
- MATH122 - Mathematics for Elementary Teachers I

Semester Credits
4
Contact Hours
77

Courses
- PSY131 - Introductory Psychology

Semester Credits
3
Contact Hours
47

Year	Semester	Semester Credits
Year 1	Winter	13

Courses
- EDU250 - Humanities & Performing Arts Educators

Semester Credits
3
Contact Hours
47

Courses
- ENG132 - College Writing and Research

Semester Credits
3
Contact Hours
47

Courses
- GEOG132 - World Regional Geography

Semester Credits
3
Contact Hours
47

Courses
- SCI212 - Earth Science for Educators
  OR
- SCI213 - Learning By Inquiry: Life Science

Semester Credits
4
Contact Hours
62

Year	Semester	Semester Credits
Year 2	Fall	13

Courses
- EDU256 - Educational Psychology

Semester Credits
3
Contact Hours
47

Courses
- EDU296 - Exceptional Child

Semester Credits
3
Contact Hours
47

Courses
- ENG246 - Introduction to Children's Literature

Semester Credits
3
Contact Hours
47

Courses
- Category 6: Natural Sciences This is an additional Natural Science requirement for this program. There is flexibility in your decision depending on the university you are transferring to. Please speak with your Pre-Education Academic Advisor. (Generic)
  OR
- CAT6 - Transfer - Lec and Lab - 2025
  OR
- CAT6 - Transfer - Lec Only - 2020
  OR
- CAT6 - Gen Ed Transfer - Lab Only - 2020

Semester Credits 4
Contact Hours 62

Year	Semester	Semester Credits
Year 2	Winter	21

Courses
- EDU260 - History in Elementary Schools

Semester Credits 3
Contact Hours 47

Courses
- EDU298 - Foundations of Educ With Pract Exp

Semester Credits 4
Contact Hours 62 - 87

Courses
- Electives: Consult your academic advisor, or transfer institution for recommended electives. (Generic)

Semester Credits 14
Contact Hours 225

2-Year Plan
Pre-Elementary Education: Recommended Sequence 2024-2025
Total Credits
64
Description
Enrollment Status: Full Time

If you have questions about the order in which you should take these courses, or the availability of these courses, please contact your advisor or the faculty contact listed below.

Program Contact Information

Office Contact: School of Health and Human Services: 313-845-9877, hhsinfo@hfcc.edu, Health Careers Education Ctr, Room: G-132

Faculty Contact: Carolyn Casale: 313-317-6580, ccasale@hfcc.edu, Health Careers Education Ctr, Room: G-133D

Academic Advisor: Hannah Doederlein: 313-317-6868, hrdoederlein@hfcc.edu, Health Careers Bldg, Room: G-203A

For archived program sequences from past catalog years, please visit: Henry Ford College Catalog Archive

Year	Semester	Semester Credits
Year 1	Fall	13

Courses
- CIS221 - Instructional Tech Educators (Pre K-12)

Semester Credits 3
Contact Hours 47

Courses
- ENG131 - Introduction to College Writing

Semester Credits 3
Contact Hours 47

Courses
- MATH122 - Mathematics for Elementary Teachers I

Semester Credits 4
Contact Hours 77

Courses
- PSY131 - Introductory Psychology

Semester Credits 3
Contact Hours 47

Year	Semester	Semester Credits
Year 1	Winter	17

Courses
- EDU250 - Humanities & Performing Arts Educators

Semester Credits 3
Contact Hours 47

Courses
- ENG132 - College Writing and Research

Semester Credits 3
Contact Hours 47

Courses
- GEOG132 - World Regional Geography

Semester Credits 3
Contact Hours 47

Courses
- SCI212 - Earth Science for Educators
  OR
- SCI213 - Learning By Inquiry: Life Science

Semester Credits 4
Contact Hours 62

Courses
- MATH222 - Mathematics for Elementary Teachers II

Semester Credits
4
Contact Hours
77

Year	Semester	Semester Credits
Year 2	Fall	13

Courses
- EDU256 - Educational Psychology

Semester Credits
3
Contact Hours
47

Courses
- EDU296 - Exceptional Child

Semester Credits
3
Contact Hours
47

Courses
- ENG246 - Introduction to Children's Literature

Semester Credits
3
Contact Hours
47

Courses
- Category 6: Natural Sciences This is an additional Natural Science requirement for this program. There is flexibility in your decision depending on the university you are transferring to. Please speak with your Pre-Education Academic Advisor. (Generic)
  OR
- CAT6 - Transfer - Lec and Lab - 2025
  OR
- CAT6 - Transfer - Lec Only - 2020
  OR
- CAT6 - Gen Ed Transfer - Lab Only - 2020

Semester Credits
4
Contact Hours
62

Year	Semester	Semester Credits
Year 2	Winter	21

Courses
- EDU 201 (inactive) (Generic)

Semester Credits
3
Contact Hours
47

Courses
- EDU 202 (inactive) (Generic)

Semester Credits
1
Contact Hours
16

Courses
- EDU260 - History in Elementary Schools

Semester Credits
3
Contact Hours
47

Courses
- Electives: Consult your academic advisor, or transfer institution for recommended electives. (Generic)

Semester Credits
14
Contact Hours
225

Program Requirements

Minimum Credits for Program Completion	Minimum GPA required for Graduation	HFC Credit Hour Residency Requirement
60	2.000	20

Simple Requisites

Core Course Requirements

Pre-Elementary Education AA - Core Course Requirements
Type
Completion Requirement

Complete ALL of the following Courses:
- EDU256-Educational Psychology 3 credits
- EDU250-Humanities/Perform Art Educat 3 credits
- EDU260-History in Elementary Schools 3 credits
- EDU296-Exceptional Child 3 credits
- EDU298-Found of Educ With Pract Exp 4 credits
- ENG246-Intro to Children's Literature 3 credits
- GEOG132-World Regional Geography 3 credits
- MATH122-Math for Elem Teachers I 4 credits
- CIS221-Instruction Tech for Educators 3 credits

Complete the required Natural Sciences courses within one of the following three pathways. Consultation with an academic advisor is recommended to determine the correct pathway.

Transferring to Wayne State University- Natural Science

Students completing the Wayne State University Transfer pathway complete the required Science course listed below.

Complete ALL of the following Courses:
- SCI212-Earth Science for Educators 4 credits

Transferring to the University of Michigan Ann Arbor- Natural Science

Students completing the University of Michigan Ann Arbor Transfer pathway, complete one the two Science courses listed below.

Complete at least 1 of the following courses:
- SCI212-Earth Science for Educators 4 credits
  OR SCI213-Lrning by Inquiry: Life Sci 4 credits

Transferring to Eastern Michigan University- Natural Science

Students completing the Eastern Michigan University Transfer pathway complete the required Science course listed below.

Complete ALL of the following Courses:
- SCI213-Lrning by Inquiry: Life Sci 4 credits

Transferring to the University of Michigan Dearborn- Natural Science

Students completing the University of Michigan- Dearborn Transfer pathway complete the required Science course listed below.

Complete at least 1 of the following courses:
- SCI212-Earth Science for Educators 4 credits
  OR SCI213-Lrning by Inquiry: Life Sci 4 credits

Additional Comments:
Education Paraprofessional Certificate: Students also earn the Education Paraprofessional Certificate after completion of the following courses: PSY131 Introductory Psychology, ENG131 Introduction College Writing, ENG132 College Writing and Research, ENG246 Intro to Children's Literature, CIS221 Instruction Tech for Educators, EDU250 Humanities/Perform Art Educat, EDU296 Exceptional Child, and (SCI212 Earth Science for Educators or SCI213 Lrning by Inquiry: Life Sci).

Support Course Requirements

Pre-Elementary Education AA - Support Course Requirements
Type
Completion Requirement

Complete ALL of the following Courses:
- ENG131-Introduction College Writing 3 credits
- ENG132-College Writing and Research 3 credits
- PSY131-Introductory Psychology 3 credits

Complete the recommended elective courses (14 credits). If you already have credits, such as MATH110 Intermediate Algebra or other course/s, that counts toward the 14 elective credits. If you have not already satisfied your electives, then see the recommended list with the corresponding transfer institution. Consultation with an academic advisor is recommended to determine the correct pathway.

Transferring to Wayne State University- Recommended Electives

Complete ANY of the following Courses:
- MATH110-Intermediate Algebra 4 credits
- MATH222-Math for Elem Teachers II 4 credits

Transferring to the University of Michigan Ann Arbor- Recommended Electives

Complete ALL of the following Courses:
- ANTH152-Mid East People and Cultures 3 credits
- SOC131-Introduction to Sociology 3 credits
- SOC251-Ethnic & Racial Diversity 3 credits

Transferring to Eastern Michigan University- Recommended Elective

Earn at least 14 credits from the following:
- SPC131-Introduction Public Speaking 3 credits
- MATH110-Intermediate Algebra 4 credits
- MATH222-Math for Elem Teachers II 4 credits
- PSCI131-Intro to Physical Science 4 credits

Transferring to the University of Michigan Dearborn- Recommended Electives

Earn at least 14 credits from the following:
- CHEM131-Principles of Chemistry 4 credits
- HPE262-Health PE for Elem Teachers 3 credits
- MATH110-Intermediate Algebra 4 credits
- MATH222-Math for Elem Teachers II 4 credits
- PHYS133-Principles of Physics 4 credits
- POLS131-Intro Amer Gov't & Pol Sci 3 credits
- PSY152-Child Psychology 3 credits
- SCI212-Earth Science for Educators 4 credits
- SCI213-Lrning by Inquiry: Life Sci 4 credits

Electives: Any 100-level or higher transfer or HFC courses can be used as electives.

Recommended electives for University of Michigan Dearborn: CHEM131 Principles of Chemistry, HPE262 Health PE for Elem Teachers, PHYS133 Principles of Physics, POLS131 Intro Amer Gov't & Pol Sci, PSY152 Child Psychology, SCI212 Earth Science for Educators, SCI213 Lrning by Inquiry: Life Sci

Recommended elective for Eastern Michigan University: SPC131 Introduction Public Speaking

Recommended electives for Wayne State University: See an academic advisor and university transfer advisor.

Earn at least 14 credits

General Education Requirements

Pre-Elementary Education AA - General Education Course Requirements
Type
Completion Requirement

Category 6: Natural Sciences

Complete any one, lab-based course, from the General Education Requirements for Transfer Degrees (MTA) list, from a different discipline (other than SCI).

Natural Sciences and Electives: Consult your academic advisor, or transfer institution, for major/minor requirements. PHYS133 Principles of Physics or CHEM131 Principles of Chemistry recommended for second Natural Sciences MTA course.

Complete at least 1 courses in the following course sets:
- CAT6 - Transfer - Lec and Lab - 2025
- CAT6 - Transfer - Lec Only - 2020
- CAT6 - Gen Ed Transfer - Lab Only - 2020

Additional Comments:
See General Education Requirements for Transfer Degrees for details.

PHARM.AS - Pre-Pharmacy

Program Information

Program Title
Pre-Pharmacy AS Degree

Program Code
PHARM.AS

Degree Type
Associate in Science

Minimum Credits for Program Completion
67

Program Eligible for Financial Aid?
Yes

Subject
Health Careers

Semesters to Complete Program
5

Program Description
Prepares students interested in becoming pharmacists for transfer to a 4-year institution. Provides students with a solid foundation using a set of carefully selected courses, which will maximize the transfer of course work. Courses were selected to include the general admission criteria used by pharmacy schools and formal transfer agreements HFC maintains with other institutions. Pre-Pharmacy students are strongly encouraged to work closely with the Pre-Pharmacy advisor before selecting their courses.

Faculty Contact	Faculty Contact Email	Faculty Contact Phone	Faculty Contact Office Location
Cynthia Scheuer	cscheuer@hfcc.edu	313-317-6575	G-132A

Academic Advisor	Academic Advisor Contact Email	Academic Advisor Contact Phone	Academic Advisor Office Location
Elyse Hogan	echogan@hfcc.edu	313-845-9730	J-114A

School
Health & Human Services

Academic Department
Health Careers, Education, and Human Services

Admissions Requirements

Admissions Requirements
Students should meet with the Pre-Pharmacy advisor on a regular basis to select the correct courses, their sequence and review the desired transfer institution requirements.

Program Learning Outcomes

- Incorporate principles of general and organic chemistry to apply concepts.
- Differentiate between algebraic and trigonometric concepts.
- Communicate personal abilities to write effectively.
- Apply biological concepts and principals in the analysis of biological processes.
- Interpret written forms of communication.
- Demonstrate interpersonal communication skills.

What Classes do I take?

2-Year Plan
Pre-Pharmacy - AS: General Pathway Recommended Sequence - Current
Total Credits
67 - 68
Description
Enrollment Status: Full Time

If you have questions about the order in which you should take these courses, or the availability of these courses, please contact your advisor or the faculty contact listed below.

Program Contact Information

Office Contact: School of Health and Human Services: 313-845-9877, hhsinfo@hfcc.edu, Health Careers Education Ctr, Room: G-132

Faculty Contact: Cynthia Scheuer: 313-317-6575, cscheuer@hfcc.edu, Health Careers Education Ctr, Room: G-132A

Academic Advisor: Elyse Hogan: 313-845-9730, echogan@hfcc.edu, Science Bldg, Room: J-114A

For students in an older version of this program, please visit Henry Ford College Catalog Archive to view required courses.

Year	Semester	Semester Credits
Year 1	Fall	14

Courses
- CAT5 - Gen Ed Transfer - 2025

Semester Credits 3
Contact Hours 47

Courses
- CHEM141 - Principles Gen & Inorganic Chemistry I

Semester Credits 5
Contact Hours 107

Courses
- ENG131 - Introduction to College Writing

Semester Credits 3
Contact Hours 47

Courses
- CIS100 - Introduction to Information Technology
  OR
- HCS131 - Computers in Health Care

Semester Credits 3
Contact Hours 47

Year	Semester	Semester Credits
Year 1	Winter	12

Courses
- CHEM142 - Principles Gen & Inorganic Chemistry II

Semester Credits 5
Contact Hours 107

Courses
- ENG132 - College Writing and Research

Semester Credits 3
Contact Hours 47

Courses
- BIO152 - Cell and Molecular Biology

Semester Credits 4
Contact Hours 92

Year	Semester	Semester Credits
Year 1	Summer	9

Courses
- POLS131 - Intro to American Gov't & Politi Science

Semester Credits 3
Contact Hours 47

Courses
- CAT5 - Gen Ed Transfer - 2025

Semester Credits 3
Contact Hours 47

Courses
- BEC151 - Principles of Macroeconomics
  OR
- BEC152 - Principles of Microeconomics

Semester Credits 3
Contact Hours 47

Year	Semester	Semester Credits
Year 2	Fall	15 - 16

Courses
- BIO233 - Anatomy and Physiology I

Semester Credits 4
Contact Hours 77

Courses
- SOC131 - Introduction to Sociology

Semester Credits 3
Contact Hours 47

Courses
- MATH115 - College Algebra
  OR
- MATH165 - Mathematics for Calculus
  OR
- MATH175 - Precalculus
  OR
- MATH180 - Calculus I
  OR
- MATH183 - Calculus II
  OR
- MATH275 - Discrete Mathematics
  OR
- MATH280 - Calculus III
  OR
- MATH283 - Linear Algebra
  OR
- MATH141 - Introduction to Statistics

Semester Credits 4 - 5
Contact Hours 77

Courses
- CHEM241 - Organic Chemistry I

Semester Credits 4
Contact Hours 62

Year	Semester	Semester Credits
Year 2	Winter	17

Courses
- BIO234 - Anatomy and Physiology II

Semester Credits 4
Contact Hours 77

Courses
- BIO251 - Microbiology

Semester Credits 5
Contact Hours 122

Courses
- CHEM242 - Organic Chemistry II

Semester Credits 4
Contact Hours 62

Courses
- CHEM243 - Microscale Organic Chemistry Lab I

Semester Credits
2
Contact Hours
62

Courses
- CHEM244 - Microscale Organic Chemistry Lab II

Semester Credits
2
Contact Hours
62

2-Year Plan
Pre-Pharmacy - AS: WSU Pathway Recommended Sequence - Current
Total Credits
76 - 82
Description
Enrollment Status: Full Time

If you have questions about the order in which you should take these courses, or the availability of these courses, please contact your advisor or the faculty contact listed below.

Program Contact Information

Office Contact: School of Health and Human Services: 313-845-9877, hhsinfo@hfcc.edu, Health Careers Education Ctr, Room: G-132

Faculty Contact: Cynthia Scheuer: 313-317-6575, cscheuer@hfcc.edu, Health Careers Education Ctr, Room: G-132A

Academic Advisor: Elyse Hogan: 313-845-9730, echogan@hfcc.edu, Science Bldg, Room: J-114A

For students in an older version of this program, please visit Henry Ford College Catalog Archive to view required courses.

Year	Semester	Semester Credits
Year 1	Fall	17

Courses
- CAT5 - Gen Ed Transfer - 2025

Semester Credits
3
Contact Hours
47

Courses
- CHEM141 - Principles Gen & Inorganic Chemistry I

Semester Credits
5
Contact Hours
107

Courses
- ENG131 - Introduction to College Writing

Semester Credits
3
Contact Hours
47

Courses
- CIS100 - Introduction to Information Technology
  OR
- HCS131 - Computers in Health Care

Semester Credits
3
Contact Hours
47

Courses
- BEC151 - Principles of Macroeconomics
  OR
- BEC152 - Principles of Microeconomics

Semester Credits
3
Contact Hours
47

Year	Semester	Semester Credits
Year 1	Winter	16

Courses
- CHEM142 - Principles Gen & Inorganic Chemistry II

Semester Credits
5
Contact Hours
107

Courses
- ENG132 - College Writing and Research

Semester Credits
3
Contact Hours
47

Courses
- PHYS131 - General Physics I

Semester Credits
4
Contact Hours
92

Courses
- BIO152 - Cell and Molecular Biology

Semester Credits 4
Contact Hours 92

Year	Semester	Semester Credits
Year 1	Summer	10

Courses
- CHEM241 - Organic Chemistry I

Semester Credits 4
Contact Hours 62

Courses
- POLS131 - Intro to American Gov't & Politi Science

Semester Credits 3
Contact Hours 47

Courses
- CAT5 - Gen Ed Transfer - 2025

Semester Credits 3
Contact Hours 47

Year	Semester	Semester Credits
Year 2	Fall	17 - 20

Courses
- BIO233 - Anatomy and Physiology I

Semester Credits 4
Contact Hours 77

Courses
- CHEM241 - Organic Chemistry I

Semester Credits 4
Contact Hours 62

Courses
- SOC131 - Introduction to Sociology

Semester Credits 3
Contact Hours 47

Courses
- SPC131 - Intro to Public Speaking

Semester Credits 3
Contact Hours 47

Courses
- MATH115 - College Algebra
  OR
- MATH165 - Mathematics for Calculus
  OR
- MATH175 - Precalculus
  OR
- MATH180 - Calculus I
  OR
- MATH183 - Calculus II
  OR
- MATH275 - Discrete Mathematics
  OR
- MATH280 - Calculus III
  OR
- MATH283 - Linear Algebra
  OR
- MATH288 - Differential Equations
  OR
- MATH141 - Introduction to Statistics

Semester Credits 3 - 6
Contact Hours 62 - 92

Year	Semester	Semester Credits
Year 2	Winter	16 - 19

Courses
- BIO234 - Anatomy and Physiology II

Semester Credits 4
Contact Hours 77

Courses
- BIO251 - Microbiology

Semester Credits 5
Contact Hours 122

Courses
- CHEM243 - Microscale Organic Chemistry Lab I

Semester Credits 2
Contact Hours 62

Courses
- MATH115 - College Algebra
  OR
- MATH165 - Mathematics for Calculus
  OR
- MATH175 - Precalculus
  OR
- MATH180 - Calculus I
  OR
- MATH183 - Calculus II
  OR
- MATH275 - Discrete Mathematics
  OR
- MATH280 - Calculus III
  OR
- MATH283 - Linear Algebra
  OR
- MATH288 - Differential Equations
  OR
- MATH141 - Introduction to Statistics

Semester Credits
3 - 6
Contact Hours
62 - 92

Courses
- CHEM244 - Microscale Organic Chemistry Lab II

Semester Credits
2
Contact Hours
62

2-Year Plan
Pre-Pharmacy - AS: Recommended Sequence 2022-2023
Total Credits
76 - 77
Description
Enrollment Status: Full Time

If you have questions about the order in which you should take these courses, or the availability of these courses, please contact your advisor or the faculty contact listed below.

Program Contact Information

Office Contact: School of Health and Human Services: 313-845-9877, hhsinfo@hfcc.edu, Health Careers Education Ctr, Room: G-132

Faculty Contact: Cynthia Scheuer: 313-317-6575, cscheuer@hfcc.edu, Health Careers Education Ctr, Room: G-132A

Academic Advisor: Elyse Hogan: 313-845-9730, echogan@hfcc.edu, Science Bldg, Room: J-114A

For students in an older version of this program, please visit Henry Ford College Catalog Archive to view required courses.

Year	Semester	Semester Credits
Year 1	Fall	15

Courses
- BIO152 - Cell and Molecular Biology

Semester Credits
4
Contact Hours
92

Courses
- CHEM141 - Principles Gen & Inorganic Chemistry I

Semester Credits
5
Contact Hours
107

Courses
- ENG131 - Introduction to College Writing

Semester Credits
3
Contact Hours
47

Courses
- CIS100 - Introduction to Information Technology
  OR
- HCS131 - Computers in Health Care

Semester Credits
3
Contact Hours
47

Year	Semester	Semester Credits
Year 1	Winter	15

Courses
- CHEM142 - Principles Gen & Inorganic Chemistry II

Semester Credits
5
Contact Hours
107

Courses
- ENG132 - College Writing and Research

Semester Credits
3
Contact Hours
47

Courses
- PHYS131 - General Physics I

Semester Credits 4
Contact Hours 92

Courses
- SPC131 - Intro to Public Speaking

Semester Credits 3
Contact Hours 47

Year	Semester	Semester Credits
Year 1	Summer	13

Courses
- CHEM241 - Organic Chemistry I

Semester Credits 4
Contact Hours 62

Courses
- POLS131 - Intro to American Gov't & Politi Science

Semester Credits 3
Contact Hours 47

Courses
- CAT5 - Gen Ed Transfer - 2025

Semester Credits 3
Contact Hours 47

Courses
- CAT5 - Gen Ed Transfer - 2025

Semester Credits 3
Contact Hours 47

Year	Semester	Semester Credits
Year 2	Fall	15 - 16

Courses
- BIO233 - Anatomy and Physiology I

Semester Credits 4
Contact Hours 77

Courses
- CHEM242 - Organic Chemistry II

Semester Credits 4
Contact Hours 62

Courses
- MATH180 - Calculus I

Semester Credits 4 - 5
Contact Hours 77

Courses
- SOC131 - Introduction to Sociology

Semester Credits 3
Contact Hours 47

Year	Semester	Semester Credits
Year 2	Winter	18

Courses
- BIO234 - Anatomy and Physiology II

Semester Credits 4
Contact Hours 77

Courses
- BIO251 - Microbiology

Semester Credits 5
Contact Hours 122

Courses
- CHEM243 - Microscale Organic Chemistry Lab I

Semester Credits 2
Contact Hours 62

Courses
- MATH141 - Introduction to Statistics

Semester Credits 4
Contact Hours 62

Courses
- BEC151 - Principles of Macroeconomics
  OR
- BEC152 - Principles of Microeconomics

Semester Credits 3
Contact Hours 47

Program Requirements

Minimum Credits for Program Completion	Minimum GPA required for Graduation	HFC Credit Hour Residency Requirement
84	2.000	20

Simple Requisites

Core Course Requirements

Pre-Pharmacy AS - Core Course Requirements
Type
Completion Requirement

Complete ALL of the following Courses:
- BIO152-Cell and Molecular Biology 4 credits
- BIO233-Anatomy and Physiology I 4 credits
- BIO234-Anatomy and Physiology II 4 credits
- BIO251-Microbiology 5 credits
- CHEM141-Prin Gen & Inorgan Chem I 5 credits
- CHEM142-Prin Gen & Inorgan Chem II 5 credits
- CHEM241-Organic Chemistry I 4 credits
- CHEM242-Organic Chemistry II 4 credits
- CHEM243-Microscale Organic Chem Lab I 2 credits
- CHEM244-MicroscaleOrganic Chem Lab II 2 credits

Support Course Requirements

Pre-Pharmacy AS - Support Course Requirements
Type
Completion Requirement

Economics

Complete at least 1 of the following courses:
- BEC151-Prin Macro Economics 3 credits
  OR BEC152-Prin Micro Economics 3 credits

Wayne State University Pathway

Students who plan to transfer to Wayne State University should take the courses listed below. ENG131 Introduction College Writing, ENG132 College Writing and Research, and SPC131 Introduction Public Speaking are required courses for WSU transfer. Consult with a Pre-pharmacy advisor to select the correct courses for transfer.

Complete ALL of the following Courses:
- MATH141-Introduction to Statistics 4 credits
- MATH180-Calculus 1 5 credits
- PHYS131-General Physics I 4 credits
- SPC131-Introduction Public Speaking 3 credits

General Education Requirements

Pre-Pharmacy AS - General Education Course Requirements
Type
Completion Requirement

Category 1: English Composition

Complete at least 1 of the following courses:
- ENG131-Introduction College Writing 3 credits
  OR ENG131A-Intro College Writing (ALP) 3 credits
  OR ENG131H-Honors Intro College Writing 3 credits

Category 2: English Composition or Communications

Complete at least 1 of the following courses:
- SPC131-Introduction Public Speaking 3 credits
  OR ENG132-College Writing and Research 3 credits
  OR ENG132H-Honors Coll Writing & Research 3 credits

Category 3: Mathematics

Complete at least 1 courses in the following course sets:
- CAT3 - Coll Algebra - Gen Ed Transfer - 2020
- CAT3 Stats - Gen Ed Transfer - 2025

Category 4: Social Sciences

Complete at least 1 of the following courses:
- POLS131-Intro Amer Gov't & Pol Sci 3 credits
  OR SOC131-Introduction to Sociology 3 credits

Category 5: Humanities and Fine Arts

Complete any two, from different disciplines, from the General Education Requirements for Transfer Degrees (MTA) list.

Complete at least 2 courses in the following course sets:
- CAT5 - Gen Ed Transfer - 2025

Additional Comments:
See General Education Requirements for Transfer Degrees for details.

Degree Specific Requirements

Pre-Pharmacy AS - Degree Specific Course Requirements
Type
Completion Requirement

Computer Technology

Complete at least 1 courses in the following course sets:
- Computer Technology - 2020

Additional Comments:
See Degree Specific Requirements for details.

PLMTT.AAS - Plant Maintenance Trades

Program Information

Program Title
Plant Maintenance Trades AAS Degree

Program Code
PLMTT.AAS

Degree Type
Associate in Applied Science

Minimum Credits for Program Completion
60

Program Eligible for Financial Aid?
Yes

Subject
Skilled Trade & Apprenticeship

Semesters to Complete Program
4

Program Description
Provides the related trades instructional classes for registered Department of Labor and other industrial apprentices involved in the maintenance of manufacturing systems. Apprentices in these skilled trade classifications take courses defined by their employer or joint apprentice committee. They also must complete on-the-job hours of work and skills certification to qualify for a journeyman s certification or the equivalent. Apprentice certificate educational programs are typically 38 credit hours or longer in duration. Apprentice or journeyman students may also be eligible to apply credits earned in their trade s educational program toward the 60 credit hours required for the degree. Additional licensing test preparation is also available for specific trades such as the State of Michigan licensing for electricians.

Faculty Contact
James Anderson

Faculty Contact Email
jwanderson3@hfcc.edu

Faculty Contact Phone
313-845-6351

Faculty Contact Office Location
E-164K

Academic Advisor
Rachel Vanzutphen

Academic Advisor Contact Email
rvanzutphen@hfcc.edu

Academic Advisor Contact Phone
313-845-9873

Academic Advisor Office Location
E-211L

School
Business, Entrepreneurship, PD

Academic Department
Skilled Trade & Apprenticeship

Admissions Requirements

Admissions Requirements
Designed for employer-sponsored industrial apprentices. Admission is restricted to those approved by TAE apprentice coordinator.

Program Learning Outcomes

Demonstrate an understanding of the mathematical functions specific to their trade.

Demonstrate an understanding of the occupational health and safety requirements relative to the workplace in general and specific to their trade.

Demonstrate an understanding of basic industrial computer applications in the general workplace and specific to their trade.

Demonstrate an understanding of the application of graphic design relative to the general workplace and specific to their trade.

Demonstrate an understanding of the following essential knowledge and skills: troubleshooting, measurement, communication, use of hand tools, use of personal protective equipment, graphic interpretation, and problem solving.

What Classes do I take?

2-Year Plan
Plant Maintenance Trades - AAS: Recommended Sequence - Current
Total Credits
60
Description
Enrollment Status: Full Time

If you have questions about the order in which you should take these courses, or the availability of these courses, please contact your advisor or the faculty contact listed below.

Program Contact Information

Office Contact: School of Business, Entrepreneurship, and Professional Development: 313-845-9645, bepdinfo@hfcc.edu, Technology Bldg, Room: E-211

Faculty Contact: James Anderson: 313-845-6351, jwanderson3@hfcc.edu, Technology Bldg, Room: E-164K

Academic Advisor: Rachel Vanzutphen: 313-845-9873, rvanzutphen@hfcc.edu, Technology Bldg, Room: E-211L

For students in an older version of this program, please visit Henry Ford College Catalog Archive to view required courses.

Year	Semester	Semester Credits
Year 1	Fall	15

Courses
- ENG131 - Introduction to College Writing

Semester Credits 3
Contact Hours 47

Courses
- Trade and Apprentice: Complete courses from the trade and apprentice options listed. (Generic)

Semester Credits 9
Contact Hours 137

Courses
- Gen Ed - 3 hrs - 2025

Semester Credits 3
Contact Hours 47

Year	Semester	Semester Credits
Year 1	Winter	15

Courses
- CIS100 - Introduction to Information Technology

Semester Credits
3
Contact Hours
47

Courses
- Gen Ed - 3 hrs - 2025

Semester Credits
3
Contact Hours
47

Courses
- Trade and Apprentice: Complete courses from the trade and apprentice options listed. (Generic)

Semester Credits
9
Contact Hours
137

Year	Semester	Semester Credits
Year 2	Fall	15

Courses
- Trade and Apprentice: Complete courses from the trade and apprentice options listed (Generic)

Semester Credits
12
Contact Hours
192

Courses
- Gen Ed - 3 hrs - 2025

Semester Credits
3
Contact Hours
47

Year	Semester	Semester Credits
Year 2	Winter	15

Courses
- Trade and Apprentice: Complete courses from the trade and apprentice options listed. (Generic)

Semester Credits
8
Contact Hours
128

Courses
- Electives: Complete additional 100-level, or higher, credits to complete this degree (Generic)

Semester Credits
7
Contact Hours
107

Program Requirements

Minimum Credits for Program Completion
60
Minimum GPA required for Graduation
2.000
HFC Credit Hour Residency Requirement
20

Simple Requisites

Core Course Requirements

Plant Maintenance Trades AAS - Core Course Requirements
Type
Completion Requirement

Trade and Apprentice Education

- Development (TADV), Electrical (TAEL), Energy Technology (TAEN), Foundation (TAFD), Fluid Power (TAFP), Graphic Design (TAGD), Industrial Materials (TAIM), Mathematics (TAMA), Material Joining (TAMJ), Manufacturing (TAMN), Maintenance Technology (TAMT), Process Instrumentation (TAPI), Plumbing/Pipefitting (TAPP), Process Tech. Practices (TAPT), Sheet Metal (TASM)

Note: Apprentice certificate program courses total a minimum of 38 credit hours and are determined by the employer and college requirements.

- Coursework is selected by the student, the employer and the TAE apprentice coordinator.
- Courses in this program are those that apply to industrial electrical (TAEL prefix), industrial mechanical (TAMT prefix), hydraulics and pneumatics (TAFP prefix), welding (CIMWD prefix), plumbing (TAPP prefix), instrumentation (TAPI prefix), and foundations (TAFD and TAMA prefixes).

Earn at least 38 credits

Support Course Requirements

Plant Maintenance Trades AAS - Support Course Requirements
Type
Completion Requirement

Complete ALL of the following Courses:
- ENG131-Introduction College Writing 3 credits
- CIS100-Intro Info Tech 3 credits

Electives

Complete additional 100-level, or higher, courses to complete the requirements for this degree.

Earn at least 7 credits

General Education Requirements

Plant Maintenance Trades AAS - General Education Requirements
Type
Completion Requirement

Category 7: General Education

Earn at least 9 credits

Additional Comments:
See General Education Requirements for Applied Degrees for details.

PLUPIP.TA.CA - Plumbing/ Pipefitting

Program Information

Program Title
Plumbing and Pipefitting

Program Code
PLUPIP.TA.CA

Degree Type
Certificate of Achievement

Subject
Skilled Trade & Apprenticeship

Semesters to Complete Program
2

Program Description
Provides students with the opportunity to assemble, install, alter, and repair pipe systems that carry water, steam, air, hydraulic fluid or other liquids/ gases. Includes sprinkler fitters.

Faculty Contact
Richard Cieslak

Faculty Contact Email
rfcieslak@hfcc.edu

Faculty Contact Phone
313-845-9645

Faculty Contact Office Location
E-164

Academic Advisor
Rachel VanZutphen

Academic Advisor Contact Email
rvanzutphen@hfcc.edu

Academic Advisor Contact Phone
313-845-9873

Academic Advisor Office Location
E-211L

School
Business, Entrepreneurship, PD

Academic Department
Skilled Trade & Apprenticeship

Admissions Requirements

Admissions Requirements
Additional Program Requirements

Complete a minimum of 38 additional credit hours in courses required within your specialization.

Program Learning Outcomes

Verify dimensions, alignment and proper joining methods are used in the construction and installation of new piping/plumbing.

Inspect and test piping to verify conformance to codes

Plan, layout and installation of plumbing/piping based on job specifications and local codes.

Inspect piping components to identify hazards, defects or the need for maintenance or adjustment.

What Classes do I take?

2-Year Plan
See TAE Office for related RTI
Total Credits
0

Program Requirements

Simple Requisites

Core Course Requirements

Plumbing and Pipefitting CA - Core Course Requirements
Type
Completion Requirement

Complete ALL of the following Courses:
- TAMA110-Industrial Appl of Basic Math 2 credits
- TAMA120-Indust Appl of Algebraic Princ 3 credits
- TAMA130-Indust Appl Geometric Prin 2 credits

Drafting/Print Reading: Complete courses based on specific company RTI

Enroll in the following Courses:
- TAGD110-Basic Shape & Size Interpret 3 credits

Plumbing: Complete courses based on specific company RTI

Enroll in the following Courses:
- PLMB101-Fund of Plumbing & Pipefitting 3 credits
- PLMB110-Drains, Wastes, and Vents 2 credits
- PLMB120-Steam and Hot Water Systems 2 credits
- PLMB250-Plumbing Pipefitting Code 2 credits

Electives: Complete courses based on specific company RTI

RTI (Related Training Instruction)

Employer specific document that details HFC courses needed to meet employer knowledge and skill requirements and fulfills HFC degree or certificate requirements.

Enroll in the following Courses:
- PLMB115-Water Supply & Distribution Sy 2 credits
- PLMB118-Plumbing, Pipefitting Material 3 credits
- TAEL103-DC & AC Electricity 4 credits
- TAFD117-Industrial Computer Applicatio 3 credits
- TAFD120-Industrial Safety Awareness 2 credits
- TAFD130-Indust App of Phys Science 3 credits
- TAFD150-Applied Technology 3 credits
- TAFP160-Pneumatic Power & Control 4 credits
- TAMA200-Indust Appl Trigonomic Princip 3 credits
- TAMT115-Maintenan Trades Print Reading 3 credits

PREENGINELECCOMP.AAS - Pre-Engineering: Electrical/Computer

Program Information

Program Title
Pre-Engineering: Electrical/Computer

Program Code
PREENGINELECCOMP.AAS

Degree Type
Associate in Applied Science

Minimum Credits for Program Completion
74

Program Eligible for Financial Aid?
Yes

Subject
Pre-Engineering

Semesters to Complete Program
4

Program Description
The Pre-Engineering: Electrical/Computer program enables students to complete the courses in the first two and half years of the Bachelor of Science program in Electrical/Computer Engineering at University of Michigan - Dearborn. Students take physics, math, chemistry, general education, and program specific courses required by the engineering program. Upon completion of this program, successful students can transfer to the University of Michigan - Dearborn to complete their final years of engineering. The HFC articulation agreement with the University of Michigan - Dearborn makes the transfer process easier. NOTE: Students should meet with the Engineering Faculty Advisor for assistance with registering for the correct series of courses.

Faculty Contact
Hassan Nameghi

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Faculty Contact Phone
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Faculty Contact Office Location
J-106B

Academic Advisor
Brandi Walthall-Johnson

Academic Advisor Contact Email
bswalthall-johnson@hfcc.edu

Academic Advisor Contact Phone
313-317-6811

Academic Advisor Office Location
G-120J

School
Science, Tech, Engr & Math

Academic Department
Engineering Technology

Admissions Requirements

Admissions Requirements
Successful completion of ENGR130 Intro to Engineering or permission from the Chair of the Pre-Engineering Department.

Program Learning Outcomes

An ability to identify, formulate, and solve engineering problems by applying principles of science and mathematics.

Demonstrate the ability to work in teams to solve introductory engineering and math problems.

Define the roles of electrical/computer engineers and decide his/her pathway.

What Classes do I take?

2-Year Plan
Pre-Engineering: Electrical/Computer - AAS: Recommended Sequence - 2022-2023
Total Credits
72
Description
Enrollment Status: Full Time

If you have questions about the order in which you should take these courses, or the availability of these courses, please contact your advisor or the faculty contact listed below.

Program Contact Information

Office Contact: School of Science, Technology, Engineering, and Mathematics (STEM): 313-845-9632, steminfo@hfcc.edu, Health Careers Education Ctr, Room: G-110, G-122 and J-115

Faculty Contact: Hassan Mohseni Nameghi: 313-317-1746, hnameghi@hfcc.edu, Science Bldg, Room: J-106B

Academic Advisor: Brandi Walthall-Johnson: 313-317-6811, bswalthall-johnson@hfcc.edu, Health Careers Bldg, Room: G-120J

For students in an older version of this program, please visit Henry Ford College Catalog Archive to view required courses.

Year	Semester	Semester Credits
Year 1	Fall	16

Courses
- ENG131 - Introduction to College Writing

Semester Credits 3
Contact Hours 47

Courses
- CHEM141 - Principles Gen & Inorganic Chemistry I

Semester Credits 5
Contact Hours 107

Courses
- MATH180 - Calculus I

Semester Credits 5
Contact Hours 77

Courses
- Course Set Not Found

Semester Credits 3
Contact Hours 47

Year	Semester	Semester Credits
Year 1	Winter	20

Courses
- MATH183 - Calculus II

Semester Credits 5
Contact Hours 77

Courses
- MATH275 - Discrete Mathematics

Semester Credits
4
Contact Hours
77

Courses
- PHYS231 - Engineering Physics I

Semester Credits
5
Contact Hours
107

Courses
- ENG135 - Business & Technical Writing & Research

Semester Credits
3
Contact Hours
47

Courses
- CAT4 - Gen Ed Applied - 2020

Semester Credits
3
Contact Hours
47

Year	Semester	Semester Credits
Year 2	Fall	20

Courses
- CAT4 - Gen Ed Applied - 2020

Semester Credits
3
Contact Hours
47

Courses
- MATH280 - Calculus III

Semester Credits
5
Contact Hours
77

Courses
- PHYS232 - Engineering Physics II

Semester Credits
5
Contact Hours
107

Courses
- ENGR205 (inactive) (Generic)

Semester Credits
4
Contact Hours
62

Courses
- Course Set Not Found

Semester Credits
3
Contact Hours
47

Year	Semester	Semester Credits
Year 2	Winter	16

Courses
- ENGR125 - Introduction Computation for Engineers

Semester Credits
3
Contact Hours
62

Courses
- ENGR240 - Circuits

Semester Credits
5
Contact Hours
77

Courses
- MATH288 - Differential Equations

Semester Credits
5
Contact Hours
77

Courses
- BEC151 - Principles of Macroeconomics
  OR
- BEC152 - Principles of Microeconomics

Semester Credits
3
Contact Hours
47

2-Year Plan
Pre-Engineering: Electrical/Computer - AAS: Recommended Sequence - Current

Total Credits
64
Description
Enrollment Status: Full Time

If you have questions about the order in which you should take these courses, or the availability of these courses, please contact your advisor or the faculty contact listed below.

Program Contact Information

Office Contact: School of Science, Technology, Engineering, and Mathematics (STEM): 313-845-9632, steminfo@hfcc.edu, Health Careers Education Ctr, Room: G-110, G-122 and J-115

Faculty Contact: Hassan Mohseni Nameghi: 313-317-1746, hnameghi@hfcc.edu, Science Bldg, Room: J-106B

Academic Advisor: Brandi Walthall-Johnson: 313-317-6811, bswalthall-johnson@hfcc.edu, Health Careers Bldg, Room: G-120J

For students in an older version of this program, please visit Henry Ford College Catalog Archive to view required courses.

Year	Semester	Semester Credits
Year 1	Fall	16

Courses
- ENG131 - Introduction to College Writing

Semester Credits 3
Contact Hours 47

Courses
- CHEM141 - Principles Gen & Inorganic Chemistry I

Semester Credits 5
Contact Hours 107

Courses
- MATH180 - Calculus I

Semester Credits 5
Contact Hours 77

Courses
- CAT5 - Gen Ed Applied - 2025

Semester Credits 3
Contact Hours 47

Year	Semester	Semester Credits
Year 1	Winter	16

Courses
- MATH183 - Calculus II

Semester Credits 5
Contact Hours 77

Courses
- PHYS231 - Engineering Physics I

Semester Credits 5
Contact Hours 107

Courses
- ENG135 - Business & Technical Writing & Research

Semester Credits 3
Contact Hours 47

Courses
- CAT4 - Gen Ed Applied - 2020

Semester Credits 3
Contact Hours 47

Year	Semester	Semester Credits
Year 2	Fall	16

Courses
- CAT4 - Gen Ed Applied - 2020

Semester Credits 3
Contact Hours 47

Courses
- MATH280 - Calculus III

Semester Credits 5
Contact Hours 77

Courses
- PHYS232 - Engineering Physics II

Semester Credits 5
Contact Hours 107

Courses
- CAT1 - Gen Ed Applied - 2020

Semester Credits 3
Contact Hours 47

Year	Semester	Semester Credits
Year 2	Winter	16

Courses
- ENGR125 - Introduction Computation for Engineers

Semester Credits 3
Contact Hours 62

Courses
- ENGR240 - Circuits

Semester Credits 5
Contact Hours 77

Courses
- MATH288 - Differential Equations

Semester Credits
5
Contact Hours
77

Courses
- BEC151 - Principles of Macroeconomics
  OR
- BEC152 - Principles of Microeconomics

Semester Credits
3
Contact Hours
47

Program Requirements

Minimum Credits for Program Completion
74

Minimum GPA required for Graduation
2.000

HFC Credit Hour Residency Requirement
20

Simple Requisites

Core Course Requirements

Pre-Engineering: Electrical/Computer AAS - Core Course Requirements
Type
Completion Requirement

Complete ALL of the following Courses:
- CHEM141-Prin Gen & Inorgan Chem I 5 credits
- MATH180-Calculus 1 5 credits
- MATH275-Discrete Mathematics 4 credits
- MATH183-Calculus II 5 credits
- MATH280-Calculus III 5 credits
- MATH288-Differential Equations 5 credits
- ENGR125-Intro Computation for Engineer 3 credits
- ENGR130-Intro to Engineering 3 credits
- ENGR240-Circuits 5 credits
- PHYS231-Engineering Physics I 5 credits
- PHYS232-Engineering Physics II 5 credits

Support Course Requirements

Pre-Engineering: Electrical/Computer AAS - Support Course Requirements
Type
Completion Requirement

Economics

Complete at least 1 of the following courses:
- BEC151-Prin Macro Economics 3 credits
  OR BEC152-Prin Micro Economics 3 credits

Complete ALL of the following Courses:
- ENG131-Introduction College Writing 3 credits
- ENG135-Bus & Tech Writing & Research 3 credits

Complete the required courses within one of the following three pathways. Consultation with an academic advisor/navigator, counselor, or faculty chair recommended to determine the correct pathway.

University of Michigan Dearborn Pathway

For students completing The University of Michigan Dearborn Transfer pathway, complete all courses.

Complete ALL of the following Courses:
- ENGR232-Statics 3 credits
- ENGR235-Mechanics of Materials 2 credits

Wayne State University Pathway

For students completing the Wayne State University Transfer pathway, complete all courses.

Students who plan to transfer to Wayne State University should take ENGR-205. CIS170 C Programming does not transfer to the Electrical Engineering program at WSU, and it is given as an option for degree completion in case we were not able to offer ENGR-205.

Complete ALL of the following Courses:
- MATH283-Linear Algebra 3 credits

Eastern Michigan University Pathway

For students completing the Eastern Michigan University Transfer pathway, complete all courses.

Complete ALL of the following Courses:
- CIS170-C Programming 3 credits
- MATH275-Discrete Mathematics 4 credits
- MATH283-Linear Algebra 3 credits

General Education Requirements

Pre-Engineering: Electrical/Computer AAS - General Education Requirements
Type
Completion Requirement

Category 4: Social Sciences

Complete any one from the General Education Requirements for Applied Degrees (MTA) list, from a different discipline other than BEC.

Complete at least 1 courses in the following course sets:
- CAT4 - Gen Ed Applied - 2020

Category 5: Humanities and Fine Arts

Complete any two from the General Education Requirements for Applied Degrees (MTA) list, from two different disciplines.

We recommend taking PHIL139 Ethics as one of your humanities if you are planning to transfer to Wayne State University.

Complete at least 2 courses in the following course sets:
- CAT6 - Gen Ed Applied - 2020

Additional Comments:
See General Education Requirements for Applied Degrees for details.

PREENGINMECHIND.AAS - Pre-Engineering: Mechanical/Industrial

Program Information

Program Title
Pre-Engineering: Mechanical/Industrial

Program Code
PREENGINMECHIND.AAS

Degree Type
Associate in Applied Science

Minimum Credits for Program Completion
70

Program Eligible for Financial Aid?
Yes

Subject
Pre-Engineering

Semesters to Complete Program
4

Program Description
The Pre-Engineering: Mechanical/Industrial program enables students to complete the courses in the first two and half years of the Bachelor of Science program in Mechanical/Industrial Engineering at University of Michigan - Dearborn. Students take physics, math, chemistry, general education, and program specific courses required by the engineering program. Upon successful completion of the program, students can transfer to University of Michigan - Dearborn to complete their final years of engineering. The HFC articulation agreement with University of Michigan - Dearborn makes the transfer process easier. Some ENGR courses transfer to Wayne State University as well.

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Faculty Contact Phone
313-317-1746

Faculty Contact Office Location
J-106B

Academic Advisor
Brandi Walthall-Johnson

Academic Advisor Contact Email
bswalthall-johnson@hfcc.edu

Academic Advisor Contact Phone
313-317-6811

Academic Advisor Office Location
G-120J

School
Science, Tech, Engr & Math

Academic Department
Engineering Technology

Admissions Requirements

Admissions Requirements
Successful completion of ENGR130 Intro to Engineering or permission from the Chair of the Pre-Engineering Department.

Courses Required for Program Admission
ENGR130 - Introduction to Engineering

Program Learning Outcomes

Describe the introductory concepts of physical sciences (chemistry and physics).

Demonstrate the ability to work in teams to solve engineering and math problems.

Define the roles of mechanical /industrial engineers and decide his/her pathway.

What Classes do I take?

2-Year Plan
Pre-Engineering: Mechanical/Industrial - AAS: Recommended Sequence 2022-2023
Total Credits
79 - 80
Description
Enrollment Status: Full Time

If you have questions about the order in which you should take these courses, or the availability of these courses, please contact your advisor or the faculty contact listed below.

Enrollment Status: Full Time

If you have questions about the order in which you should take these courses, or the availability of these courses, please contact your advisor or the faculty contact listed below.

Program Contact Information

Office Contact: School of Science, Technology, Engineering, and Mathematics (STEM): 313-845-9632, steminfo@hfcc.edu, Health Careers Education Ctr, Room: G-110, G-122 and J-115

Faculty Contact: Hassan Mohseni Nameghi: 313-317-1746, hnameghi@hfcc.edu, Science Bldg, Room: J-106B

Academic Advisor: Brandi Walthall-Johnson: 313-317-6811, bswalthall-johnson@hfcc.edu Health Careers Bldg, Room: G-120J

For students in an older version of this program, please visit Henry Ford College Catalog Archive to view required courses.

Year	Semester	Semester Credits
Year 1	Fall	19 - 20

Courses
- CHEM141 - Principles Gen & Inorganic Chemistry I

Semester Credits 5
Contact Hours 107

Courses
- ENG131 - Introduction to College Writing

Semester Credits 3
Contact Hours 47

Courses
- MATH180 - Calculus I

Semester Credits 5
Contact Hours 77

Courses
- ENGR121 - Engineering Design and 3D Printing
  OR
- DRAF120 - Introduction to CAD

Semester Credits 3 - 4
Contact Hours 62 - 92

Courses
- Category 5: Humanities and Fine Arts: Complete any one (Generic)

Semester Credits
3
Contact Hours
47

Year	Semester	Semester Credits
Year 1	Winter	21

Courses
- CHEM142 - Principles Gen & Inorganic Chemistry II

Semester Credits
5
Contact Hours
107

Courses
- ENG135 - Business & Technical Writing & Research

Semester Credits
3
Contact Hours
47

Courses
- ENGR201 - Science of Materials

Semester Credits
3
Contact Hours
47

Courses
- MATH183 - Calculus II

Semester Credits
5
Contact Hours
77

Courses
- PHYS231 - Engineering Physics I

Semester Credits
5
Contact Hours
107

Year	Semester	Semester Credits
Year 2	Fall	21

Courses
- ENGR232 - Statics

Semester Credits
3
Contact Hours
62

Courses
- ENGR235 - Mechanics of Materials

Semester Credits
2
Contact Hours
32

Courses
- MATH280 - Calculus III

Semester Credits
5
Contact Hours
77

Courses
- PHYS232 - Engineering Physics II

Semester Credits
5
Contact Hours
107

Courses
- Category 5: Humanities and Fine Arts: Complete any one from a different discipline (Generic)

Semester Credits
3
Contact Hours
47

Courses
- Category 4: Social Sciences: Complete any one, from a different discipline (other than BEC). (Generic)

Semester Credits
3
Contact Hours
47

Year	Semester	Semester Credits
Year 2	Winter	18

Courses
- ENGR125 - Introduction Computation for Engineers

Semester Credits
3
Contact Hours
62

Courses
- MATH288 - Differential Equations

Semester Credits 5
Contact Hours 77

Courses
- Category 4: Social Sciences: Complete any one, from a different discipline (other than BEC). (Generic)

Semester Credits 3
Contact Hours 47

Courses
- BEC151 - Principles of Macroeconomics
  OR
- BEC152 - Principles of Microeconomics

Semester Credits 3
Contact Hours 47

Courses
- Pathway: Complete the courses in either Industrial Engineering or Mechanical Engineering. (Generic)
  OR
- BAC131 - Introduction to Financial Accounting
  OR
- BAC132 - Introduction to Managerial Accounting
  OR
- ENGR233 (inactive) (Generic)

Semester Credits 4
Contact Hours 62

2-Year Plan
Pre-Engineering: Mechanical/Industrial - AAS: Recommended Sequence - Current
Total Credits
79 - 80
Description
Enrollment Status: Full Time

If you have questions about the order in which you should take these courses, or the availability of these courses, please contact your advisor or the faculty contact listed below.

Program Contact Information

Office Contact: School of Science, Technology, Engineering, and Mathematics (STEM): 313-845-9632, steminfo@hfcc.edu, Health Careers Education Ctr, Room: G-110, G-122 and J-115

Faculty Contact: Hassan Mohseni Nameghi: 313-317-1746, hnameghi@hfcc.edu, Science Bldg, Room: J-106B

Academic Advisor: Brandi Walthall-Johnson: 313-317-6811, bswalthall-johnson@hfcc.edu Health Careers Bldg, Room: G-120J

For students in an older version of this program, please visit Henry Ford College Catalog Archive to view required courses.

Year	Semester	Semester Credits
Year 1	Fall	19 - 20

Courses
- CHEM141 - Principles Gen & Inorganic Chemistry I

Semester Credits 5
Contact Hours 107

Courses
- ENG131 - Introduction to College Writing

Semester Credits 3
Contact Hours 47

Courses
- MATH180 - Calculus I

Semester Credits 5
Contact Hours 77

Courses
- ENGR121 - Engineering Design and 3D Printing
  OR
- DRAF120 - Introduction to CAD

Semester Credits 3 - 4
Contact Hours 62 - 92

Courses
- Category 5: Humanities and Fine Arts: Complete any one. (Generic)

Semester Credits 3
Contact Hours 47

Year	Semester	Semester Credits
Year 1	Winter	21

Courses
- CHEM142 - Principles Gen & Inorganic Chemistry II

Semester Credits 5
Contact Hours 107

Courses
- ENG135 - Business & Technical Writing & Research

Semester Credits 3
Contact Hours 47

Courses
- ENGR201 - Science of Materials

Semester Credits 3
Contact Hours 47

Courses
- MATH183 - Calculus II

Semester Credits 5
Contact Hours 77

Courses
- PHYS231 - Engineering Physics I

Semester Credits
5
Contact Hours
107

Year	Semester	Semester Credits
Year 2	Fall	21

Courses
- ENGR232 - Statics

Semester Credits
3
Contact Hours
62

Courses
- ENGR235 - Mechanics of Materials

Semester Credits
2
Contact Hours
32

Courses
- MATH280 - Calculus III

Semester Credits
5
Contact Hours
77

Courses
- PHYS232 - Engineering Physics II

Semester Credits
5
Contact Hours
107

Courses
- Category 5: Humanities and Fine Arts: Complete any one from a different discipline. (Generic)

Semester Credits
3
Contact Hours
47

Courses
- Category 4: Social Sciences: Complete any one, from a different discipline (other than BEC). (Generic)

Semester Credits
3
Contact Hours
47

Year	Semester	Semester Credits
Year 2	Winter	18

Courses
- ENGR125 - Introduction Computation for Engineers

Semester Credits
3
Contact Hours
62

Courses
- MATH288 - Differential Equations

Semester Credits
5
Contact Hours
77

Courses
- Category 4: Social Sciences: Complete any one, from a different discipline (other than BEC). (Generic)

Semester Credits
3
Contact Hours
47

Courses
- BEC151 - Principles of Macroeconomics
  OR
- BEC152 - Principles of Microeconomics

Semester Credits
3
Contact Hours
47

Courses
- Pathway: Complete the courses in either Industrial Engineering or Mechanical Engineering. (Generic)
  OR
- BAC131 - Introduction to Financial Accounting
  OR
- BAC132 - Introduction to Managerial Accounting
  OR
- ENGR233 (inactive) (Generic)

Semester Credits
4
Contact Hours
62

Program Requirements

Minimum Credits for Program Completion	Minimum GPA required for Graduation	HFC Credit Hour Residency Requirement
70	2.000	20

Simple Requisites

Core Course Requirements

Pre-Engineering: Mechanical/Industrial AAS - Core Course Requirements
Type
Completion Requirement

Complete ALL of the following Courses:
- CHEM141-Prin Gen & Inorgan Chem I 5 credits
- ENGR125-Intro Computation for Engineer 3 credits
- ENGR201-Science of Materials 3 credits
- ENGR232-Statics 3 credits
- ENGR235-Mechanics of Materials 2 credits
- MATH180-Calculus 1 5 credits
- MATH183-Calculus II 5 credits
- MATH280-Calculus III 5 credits
- MATH288-Differential Equations 5 credits
- PHYS231-Engineering Physics I 5 credits
- PHYS232-Engineering Physics II 5 credits

Support Course Requirements

Pre-Engineering: Mechanical/Industrial AAS - Support Course Requirements
Type
Completion Requirement

Economics

Complete at least 1 of the following courses:
- BEC151-Prin Macro Economics 3 credits
  OR BEC152-Prin Micro Economics 3 credits

Complete ALL of the following Courses:
- ENG131-Introduction College Writing 3 credits
- ENG135-Bus & Tech Writing & Research 3 credits

Complete the required courses within one of the following three pathways. Consultation with an academic advisor/navigator, counselor, or faculty chair recommended to determine the correct pathway.

Eastern Michigan University Pathway

For students completing the Eastern Michigan University Transfer pathway.

- **Electives**: Complete any three elective credits, transferable to Eastern Michigan University. See an Academic Advisor for assistance selecting a course.

Complete ALL of the following Courses:
- MATH283-Linear Algebra 3 credits
- ENGR130-Intro to Engineering 3 credits

Wayne State University Pathway

For students completing the Wayne State University Transfer pathway, complete all courses.

Students who plan to transfer to Wayne State University should take ENGR-233. ENGR-240 transfers to WSU as ECE-3XXX, an upper elective course.

Complete ALL of the following Courses:
- ENGR121-Engin Design & 3D Printing 3 credits
- ENGR240-Circuits 5 credits

University of Michigan Dearborn Pathway

For students completing The University of Michigan Dearborn Transfer pathway, complete all courses.

Electives: Complete any three elective credits, transferable to The University of Michigan Dearborn. See an Academic Advisor for assistance selecting a course.

Complete ALL of the following Courses:
- ENGR130-Intro to Engineering 3 credits
- CHEM142-Prin Gen & Inorgan Chem II 5 credits
- ENGR121-Engin Design & 3D Printing 3 credits
  OR DRAF120-Intro to CAD 4 credits

General Education Requirements

Pre-Engineering: Mechanical/Industrial AAS - General Education Course Requirements
Type
Completion Requirement

Category 4: Social Sciences

Complete any one from the General Education Requirements for Applied Degrees (MTA) list, from a different discipline other than BEC.

Complete at least 1 courses in the following course sets:
- CAT4 - Gen Ed Applied - 2020

Category 5: Humanities and Fine Arts

Complete any two from the General Education Requirements for Applied Degrees (MTA) list, from two different disciplines.

Complete at least 2 courses in the following course sets:
- Untitled Course set

Additional Comments:
See General Education Requirements for Applied Degrees for details.

PRENURSING - Pre-Nursing

Program Information

Program Title
Pre-Nursing AS Degree

Program Code
PRENURSING

Degree Type
Associate in Science

Minimum Credits for Program Completion
61

Program Eligible for Financial Aid?
Yes

Subject
Nursing

Semesters to Complete Program
3

Program Description
Provides students with the general academic background to be successful in their chosen health care field. For students pursuing admission to the [Nursing](https://www.hfcc.edu/catalog/programs/2662) program, please follow these steps:

1. Complete the program admission requirements including NAT exam
2. Apply to the [Nursing](https://www.hfcc.edu/catalog/programs/2662) program
3. Complete the remaining [Nursing](https://www.hfcc.edu/catalog/programs/2662) program admission requirements
4. This degree does **not** have to be completed to be eligible for admission/entry to the [Nursing](https://www.hfcc.edu/catalog/programs/2662) program

Faculty Contact
Trina Moore

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Faculty Contact Phone
313-317-1781

Faculty Contact Office Location
SN-120A

Academic Advisor
Julie Fountain

Academic Advisor Contact Email
jafountain@hfcc.edu

Academic Advisor Contact Phone
313-317-6807

Academic Advisor Office Location
G-203B

School
Health & Human Services

Academic Department
Nursing

Program Learning Outcomes

Civil Society and Culture: Compare and contrast the United States globally with other nations or regions, addressing one or both of the following: (1) social, economic, political and cultural issues or (2) patterns of diversity or inequality, including racial, ethnic, religious or gender differences.

Communication: Effectively communicate ideas appropriate to their discipline using Standard English, through written and verbal communication.

Computer Technology: Demonstrate skills for computer technology, including internet, network and advanced file operations. Skills will include organizing, managing, and presenting data using office productivity software. Students will also identify security and integrity threats and identify unethical actions within their social or professional environments.

Critical Thinking/Information Literacy: Demonstrate the ability to analyze and evaluate information and identify the need for research to draw conclusions, formulate inferences, solve problems and make decisions. Students will also demonstrate information literacy skills by locating, evaluating, selecting, organizing, synthesizing, and ethically documenting information from multiple sources using both informal and formal formats, as appropriate for diverse writing situations.

Quantitative Literacy: Apply quantitative skills to analyze situations and make decisions in a variety of contexts.

What Classes do I take?

2-Year Plan
Pre-Nursing - AS: Recommended Sequence - Current
Total Credits
25 - 26
Description
Enrollment Status: Full Time

If you have questions about the order in which you should take these courses, or the availability of these courses, please contact your advisor or the faculty contact listed below.

Program Contact Information

Office Contact: School of Health and Human Services: 313-845-9877, hhsinfo@hfcc.edu, Health Careers Education Ctr, Room: G-132

Faculty Contact: Julie Fountain: 313-317-6807, jafountain@hfcc.edu, Health Careers Education Ctr, Room: G-203B

Academic Advisor: Julie Fountain: 313-317-6807, jafountain@hfcc.edu, Health Careers Education Ctr, Room: G-203B

For students in an older version of this program, please visit Henry Ford College Catalog Archive to view required courses.

Year	Semester	Semester Credits
Year 1	Summer	4

Courses
- BIO131 - Introduction to Biology

Semester Credits
4
Contact Hours
92

Year	Semester	Semester Credits
Year 1	Fall	11 - 12

Courses
- BIO233 - Anatomy and Physiology I

Semester Credits
4
Contact Hours
77

Courses
- CIS100 - Introduction to Information Technology
  OR
- HCS131 - Computers in Health Care

Semester Credits 3
Contact Hours 47

Courses
- Apply: Students interested in the Nursing or Nursing - Advancement of LPNs to RNs degrees should submit a nursing program application with all required documentation by application deadline. Application deadline dates can be found on the Nursing Program website (Generic)

Semester Credits -
Contact Hours -

Courses
- MATH115 - College Algebra
  OR
- MATH131 - Mathematics for the Modern World
  OR
- MATH175 - Precalculus
  OR
- MATH180 - Calculus I

Semester Credits 4 - 5
Contact Hours 62 - 77

Courses
- Nursing Admissions Test (NAT): Complete the NAT Test in Fall 1 or Winter 1 (Generic)

Semester Credits -
Contact Hours -

Year	Semester	Semester Credits
Year 1	Winter	10

Courses
- BIO234 - Anatomy and Physiology II

Semester Credits 4
Contact Hours 77

Courses
- ENG131 - Introduction to College Writing

Semester Credits 3
Contact Hours 47

Courses
- PSY131 - Introductory Psychology

Semester Credits 3
Contact Hours 47

Courses
- Nursing Admissions Test (NAT): Complete the NAT Test in Fall 1 or Winter 1 (Generic)

Semester Credits -
Contact Hours -

Program Requirements

Minimum Credits for Program Completion
60

Minimum GPA required for Graduation
2.000

HFC Credit Hour Residency Requirement
20

Simple Requisites

Core Course Requirements

Pre-Nursing AS - Core Course Requirements
Type
Completion Requirement

Complete ALL of the following Courses:
- BIO131-Introduction to Biology 4 credits
- BIO233-Anatomy and Physiology I 4 credits
- BIO234-Anatomy and Physiology II 4 credits
- ENG131-Introduction College Writing 3 credits
- PSY131-Introductory Psychology 3 credits

Category 3: Mathematics

Complete at least 1 of the following courses:
- MATH115-College Algebra 5 credits
  OR MATH131-Math for the Modern World 4 credits
  OR MATH141-Introduction to Statistics 4 credits
  OR MATH165-Mathematics for Calculus 6 credits
  OR MATH175-Precalculus 5 credits
  OR MATH180-Calculus 1 5 credits

Computer Technology

Complete at least 1 of the following courses:
- CIS100-Intro Info Tech 3 credits
  OR HCS131-Computers in Health Care 3 credits

Support Course Requirements

Pre-Nursing AS - Support Course Requirements
Type
Completion Requirement

Complete ALL of the following Courses:
- BIO251-Microbiology 5 credits
- CHEM131-Principles of Chemistry 4 credits
- ENG132-College Writing and Research 3 credits
- SOC131-Introduction to Sociology 3 credits
- PSY253-Lifespan Development 3 credits
- NSG285-Pathophysiology for Nurses 4 credits
- NCS112-Competency Evaluated NA(CENA) 4 credits

Additional Comments:
See General Education Requirements for Transfer Degrees for details.

PREOPHTHALMICTECH - Pre-Ophthalmic Technician

Program Information

Program Title
Pre-Ophthalmic Technician AS Degree

Program Code
PREOPHTHALMICTECH

Degree Type
Associate in Science

Minimum Credits for Program Completion
60

Program Eligible for Financial Aid?
Yes

Subject
Ophthalmic Technician

Semesters to Complete Program
4

Program Description
Provides students with the general academic background to be successful in their chosen health care field. For students pursuing admission to the [Ophthalmic Technician](/programs/ophthalmic-technician-associate-applied-science) program, please follow these steps:

1. Apply to the Ophthalmic Technician (OPT) program at the Health Careers Admissions Process site.
Students are strongly urged to meet with a health careers student success navigator (advisor) within the first semester of course work.

2. Complete the [Ophthalmic Technician](/programs/ophthalmic-technician-associate-applied-science) program admission requirements.
a. College GPA of at least 2.60 or higher for a minimum of 12 academic credits, excluding lower than 100-level courses, HPE activity, studio and performance classes (if applicable),
b. ACCUPLACER Reading score of 80 or better.
c. Eligible for placement into ENG 131
d. Complete [BIO-134: Essentials of Anatomy and Physiology](/courses/bio-134) or college equivalent with a C or better.
e. Complete one of the following:
[MATH 100: Basic Technical Mathematics](/courses/math-100) with a C or better.
[MATH 101:Mathematics for Health Careers](/courses/math-101) with a C or better.
Eligible for placement into MATH 080.

Contact the Health Careers Student Success Navigator to confirm completion of steps 1 & 2 and placement on the qualified list.

While on the qualified list complete as many of the required program support courses as possible in the [Ophthalmic Technician](/programs/ophthalmic-technician-associate-applied-science) program. This degree does **NOT** have to be completed to be eligible for admission / entry to the [Ophthalmic Technician](/programs/ophthalmic-technician-associate-applied-science) program. Only program admission requirements must be completed to be placed on the qualified list and begin the program when the next open seat occurs and final approval has been given by the OPT Program Director.

Faculty Contact
Cynthia Scheuer

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Faculty Contact Phone
313-317-6575

Faculty Contact Office Location
G-132A

Academic Advisor
Samer Atris

Academic Advisor Contact Email
satris1@hfcc.edu

Academic Advisor Contact Phone
313-317-6862

Academic Advisor Office Location
G-203C

School
Health & Human Services

Academic Department
Health Careers, Education, and Human Services

Program Learning Outcomes

Civil Society and Culture: Compare and contrast the United States globally with other nations or regions, addressing one or both of the following: (1) social, economic, political and cultural issues or (2) patterns of diversity or inequality, including racial, ethnic, religious or gender differences.

Communication: Effectively communicate ideas appropriate to their discipline using Standard English, through written and verbal communication.

Computer Technology: Demonstrate skills for computer technology, including internet, network and advanced file operations. Skills will include organizing, managing, and presenting data using office productivity software. Students will also identify security and integrity threats and identify unethical actions within their social or professional environments.

Critical Thinking/Information Literacy: Demonstrate the ability to analyze and evaluate information and identify the need for research to draw conclusions, formulate inferences, solve problems and make decisions. Students will also demonstrate information literacy skills by locating, evaluating, selecting, organizing, synthesizing, and ethically documenting information from multiple sources using both informal and formal formats, as appropriate for diverse writing situations.

Quantitative Literacy: Apply quantitative skills to analyze situations and make decisions in a variety of contexts.

What Classes do I take?

2-Year Plan
Pre-Ophthalmic Technician - AS: Recommended Sequence - Current
Total Credits
60 - 65
Description
Enrollment Status: Full Time

If you have questions about the order in which you should take these courses, or the availability of these courses, please contact your advisor or the faculty contact listed below.

Program Contact Information

Office Contact: School of Health and Human Services: 313-845-9877, hhsinfo@hfcc.edu, Health Careers Education Ctr, Room: G-132

Faculty Contact: Kathy Campbell: 313-317-1720, kacampbell4@hfcc.edu, Health Careers Education Ctr, Room: G-133G

Academic Advisor: Samer Atris: 313-317-6862, satris1@hfcc.edu, Health Careers Bldg, Room: G-203C

For students in an older version of this program, please visit Henry Ford College Catalog Archive to view required courses.

Year	Semester	Semester Credits
Year 1	Fall	15 - 18

Courses
- AH100 - Medical Terminology

Semester Credits
4
Contact Hours
62

Courses
- BIO134 - Essentials of Anatomy and Physiology
  OR
- BIO233 - Anatomy and Physiology I
- **AND** BIO234 - Anatomy and Physiology II

Semester Credits
5 - 8
Contact Hours
92 - 154

Courses
- ENG131 - Introduction to College Writing

Semester Credits
3
Contact Hours
47

Courses
- PSY131 - Introductory Psychology

Semester Credits
3
Contact Hours
47

Year	Semester	Semester Credits
Year 1	Winter	15 - 16

Courses
- HCS124 - Basic Health Assessment

Semester Credits
1
Contact Hours
16

Courses
- HCS131 - Computers in Health Care

Semester Credits
3
Contact Hours
47

Courses
- BIO135 - Microbiology for Allied Health Sciences
  OR
- BIO251 - Microbiology

Semester Credits
4 - 5
Contact Hours
77 - 122

Courses
- CAT2 - Gen Ed Transfer - 2020

Semester Credits
3
Contact Hours
47

Courses
- CAT6 - Transfer - Lec and Lab - 2025
  OR
- CAT6 - Transfer - Lec Only - 2020
  OR
- CAT6 - Gen Ed Transfer - Lab Only - 2020

Semester Credits
4
Contact Hours
62

Year	Semester	Semester Credits
Year 2	Fall	14 - 15

Courses
- CAT5 - Gen Ed Transfer - 2025

Semester Credits
3
Contact Hours
47

Courses
- MATH115 - College Algebra
  OR
- MATH165 - Mathematics for Calculus
  OR
- MATH175 - Precalculus
  OR
- MATH180 - Calculus I
  OR
- MATH183 - Calculus II

Semester Credits
5 - 6
Contact Hours
77 - 92

Courses
- CAT6 - Transfer - Lec and Lab - 2025
  OR
- CAT6 - Transfer - Lec Only - 2020
  OR
- CAT6 - Gen Ed Transfer - Lab Only - 2020

Semester Credits 3
Contact Hours 47

Courses
- Electives: Complete additional 100-level, or higher, credits to complete this degree. (Generic)

Semester Credits 3
Contact Hours 47

Year	Semester	Semester Credits
Year 2	Winter	16

Courses
- CAT5 - Gen Ed Transfer - 2025

Semester Credits 3
Contact Hours 47

Courses
- CAT6 - Transfer - Lec and Lab - 2025
  OR
- CAT6 - Transfer - Lec Only - 2020
  OR
- CAT6 - Gen Ed Transfer - Lab Only - 2020

Semester Credits 3
Contact Hours 47

Courses
- Electives: Complete additional 100-level, or higher, credits to complete this degree. (Generic)

Semester Credits 7
Contact Hours 107

Courses
- Social Science: Complete one Political Science (POLS) or Sociology (SOC) course. (Generic)

Semester Credits 3
Contact Hours 47

Program Requirements

Minimum Credits for Program Completion
60
Minimum GPA required for Graduation
2.000
HFC Credit Hour Residency Requirement
20

Simple Requisites

Core Course Requirements

Pre-Ophthalmic Technician AS - Core Course Requirements
Type
Completion Requirement

Complete ALL of the following Courses:
- AH100-Medical Terminology 4 credits
- HCS124-Basic Health Assessment 1 credits
- ENG131-Introduction College Writing 3 credits
- HCS131-Computers in Health Care 3 credits
- PSY131-Introductory Psychology 3 credits

Microbiology

Complete at least 1 of the following courses:
- BIO135-Microbiology for AHS 4 credits
  OR BIO251-Microbiology 5 credits

Biology

Earn at least 5 credits from the following:
- BIO134-Essentials Anatomy&Physiology 5 credits
- BIO233-Anatomy and Physiology I 4 credits
  AND BIO234-Anatomy and Physiology II 4 credits

Support Course Requirements

Pre-Ophthalmic Technician AS - Support Course Requirements
Type
Completion Requirement

Category 3: Mathematics

Complete at least 1 of the following courses:
- MATH115-College Algebra 5 credits
  OR MATH165-Mathematics for Calculus 6 credits
  OR MATH175-Precalculus 5 credits
  OR MATH180-Calculus 1 5 credits
  OR MATH183-Calculus II 5 credits

Category 4: Social Sciences

Complete one Political Science (POLS) or Sociology (SOC) course.

Complete at least 1 courses in the following course sets:
- CAT4 - Gen Ed Transfer - 2020

General Education Requirements

Pre-Ophthalmic Technician AS - General Education Course Requirements
Type
Completion Requirement

Category 2: English Composition or Communications

Complete any one, from the General Education Requirements for Transfer Degrees (MTA) list.

Complete at least 1 courses in the following course sets:
- CAT2 - Gen Ed Transfer - 2020

Category 5: Humanities and Fine Arts

Complete any two, from different disciplines, from the General Education Requirements for Transfer Degrees (MTA) list.

Complete at least 2 courses in the following course sets:

- CAT5 - Gen Ed Transfer - 2025

Category 6: Natural Sciences

Complete any 10 credits (at least one other than BIO), from the General Education Requirements for Transfer Degrees (MTA) list.

Earn at least 10 credits from the following:

- CAT6 - Transfer - Lec and Lab - 2025
- CAT6 - Transfer - Lec Only - 2020
- CAT6 - Gen Ed Transfer - Lab Only - 2020

Additional Comments:
See General Education Requirements for Transfer Degrees for details.

PREPHYSTHERAPYASST - Pre-Physical Therapist Assistant

Program Information

Program Title
Pre-Physical Therapy Assistant AS Degree

Program Code
PREPHYSTHERAPYASST

Degree Type
Associate in Science

Minimum Credits for Program Completion
60

Program Eligible for Financial Aid?
Yes

Subject
Physical Therapy Assistant

Semesters to Complete Program
4

Program Description
Provides students with the general academic background to be successful in their chosen health care field. For students pursuing admission to the [Physical Therapist Assistant](https://www.hfcc.edu/catalog/programs/2672) program, please follow these steps:

1. Apply to the Physical Therapist Assistant (PTA) program at the Health Careers Admissions Process site.
Students are strongly urged to meet with a health careers student success navigator (advisor) within the first semester of course work.

2. Complete the [Physical Therapist Assistant](https://www.hfcc.edu/catalog/programs/2672) program admission requirements.

a. College GPA of at least 2.80 or higher for a minimum of 12 academic credits excluding lower than 100 level courses.
b. ACCUPLACER Reading score of 80 or better.
c. Eligible for placement into ENG 131.
d. Eligible for placement into MATH 110.
e. *Successful completion of [BIO-233: Anatomy and Physiology I](/courses/bio-233), or equivalent, with a B- or better, within five years of admission.
f. Successful completion of [AH-100: Medical Terminology](/courses/ah-100), or equivalent, with a B- or better.
g. Twenty hours or more of observation in a physical therapy setting observing a PTA at work with a letter of confirmation from the supervisory PT or PTA (submit document to Health Careers Student Success Navigator in the Welcome Center).
*There may be other pre-admission coursework the student needs to complete based on results of placement tests and/or high school coursework.

Contact the Health Careers Student Success Navigator to confirm completion of steps 1 & 2 and placement on the qualified list.

While on the qualified list complete as many of the required program support courses as possible in the [Physical Therapist Assistant](https://www.hfcc.edu/catalog/programs/2672) program. This degree does **NOT** have to be completed to be eligible for admission / entry to the [Physical Therapist Assistant](https://www.hfcc.edu/catalog/programs/2672) program. Only program admission requirements must be completed to be placed on the qualified list and begin the program when the next open seat occurs and final approval has been given by the PTA Program Director.

Faculty Contact
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Faculty Contact Phone
313-317-6575

Faculty Contact Office Location
G-132A

School
Health & Human Services

Academic Department
Health Careers, Education, and Human Services

Program Learning Outcomes

Civil Society and Culture: Compare and contrast the United States globally with other nations or regions, addressing one or both of the following: (1) social, economic, political and cultural issues or (2) patterns of diversity or inequality, including racial, ethnic, religious or gender differences.

Communication: Effectively communicate ideas appropriate to their discipline using Standard English, through written and verbal communication.

Computer Technology: Demonstrate skills for computer technology, including internet, network and advanced file operations. Skills will include organizing, managing, and presenting data using office productivity software. Students will also identify security and integrity threats and identify unethical actions within their social or professional environments.

Critical Thinking/Information Literacy: Demonstrate the ability to analyze and evaluate information and identify the need for research to draw conclusions, formulate inferences, solve problems and make decisions. Students will also demonstrate information literacy skills by locating, evaluating, selecting, organizing, synthesizing, and ethically documenting information from multiple sources using both informal and formal formats, as appropriate for diverse writing situations.

Quantitative Literacy: Apply quantitative skills to analyze situations and make decisions in a variety of contexts.

What Classes do I take?

2-Year Plan
Pre-Physical Therapist Assistant - AS: Recommended Sequence - Current
Total Credits
60 - 63
Description
Enrollment Status: Full Time

If you have questions about the order in which you should take these courses, or the availability of these courses, please contact your advisor or the faculty contact listed below.

Program Contact Information

Office Contact: School of Health and Human Services: 313-845-9877, hhsinfo@hfcc.edu, Health Careers Education Ctr, Room: G-132

Faculty Contact: Cynthia Scheuer: 313-317-6575, cscheuer@hfcc.edu, Health Careers Education Ctr, Room: G-132A

For students in an older version of this program, please visit Henry Ford College Catalog Archive to view required courses.

Year	Semester	Semester Credits
Year 1	Fall	15 - 17

Courses

- AH100 - Medical Terminology

Semester Credits	4
Contact Hours	62

Courses
- BIO233 - Anatomy and Physiology I

Semester Credits
4
Contact Hours
77

Courses
- ENG131 - Introduction to College Writing

Semester Credits
3
Contact Hours
47

Courses
- MATH110 - Intermediate Algebra
  OR
- MATH115 - College Algebra
  OR
- MATH165 - Mathematics for Calculus
  OR
- MATH175 - Precalculus
  OR
- MATH180 - Calculus I
  OR
- MATH183 - Calculus II

Semester Credits
4 - 6
Contact Hours
62 - 92

Year	Semester	Semester Credits
Year 1	Winter	14

Courses
- BIO234 - Anatomy and Physiology II

Semester Credits
4
Contact Hours
77

Courses
- HCS131 - Computers in Health Care

Semester Credits
3
Contact Hours
47

Courses
- PHYS133 - Principles of Physics

Semester Credits
4
Contact Hours
77

Courses
- POLS131 - Intro to American Gov't & Politi Science

Semester Credits
3
Contact Hours
47

Year	Semester	Semester Credits
Year 2	Fall	14 - 15

Courses
- CAT2 - Gen Ed Transfer - 2020

Semester Credits
3
Contact Hours
47

Courses
- CAT5 - Gen Ed Transfer - 2025

Semester Credits
3
Contact Hours
47

Courses
- MATH115 - College Algebra
  OR
- MATH165 - Mathematics for Calculus
  OR
- MATH175 - Precalculus
  OR
- MATH180 - Calculus I
  OR
- MATH183 - Calculus II

Semester Credits
5 - 6
Contact Hours
77 - 92

Courses
- CAT6 - Transfer - Lec and Lab - 2025
  OR
- CAT6 - Transfer - Lec Only - 2020
  OR
- CAT6 - Gen Ed Transfer - Lab Only - 2020

Semester Credits
3
Contact Hours
47

Year	Semester	Semester Credits
Year 2	Winter	17

Courses
- PSY131 - Introductory Psychology

Semester Credits 3
Contact Hours 47

Courses
- CAT5 - Gen Ed Transfer - 2025

Semester Credits 3
Contact Hours 47

Courses
- Electives: Complete additional 100-level, or higher, credits to complete this degree. (Generic)

Semester Credits 11
Contact Hours 176

Program Requirements

Minimum Credits for Program Completion
60
Minimum GPA required for Graduation
2.000
HFC Credit Hour Residency Requirement
20

Simple Requisites

Core Course Requirements

Pre-Physical Therapy Assistant AS - Core Course Requirements
Type
Completion Requirement

Complete ALL of the following Courses:
- AH100-Medical Terminology 4 credits
- BIO233-Anatomy and Physiology I 4 credits
- BIO234-Anatomy and Physiology II 4 credits
- PHYS133-Principles of Physics 4 credits
- ENG131-Introduction College Writing 3 credits
- HCS131-Computers in Health Care 3 credits
- POLS131-Intro Amer Gov't & Pol Sci 3 credits

Category 3: Mathematics

Complete at least 1 of the following courses:
- **OR** MATH110-Intermediate Algebra 4 credits
  OR MATH115-College Algebra 5 credits
  OR MATH165-Mathematics for Calculus 6 credits
  OR MATH175-Precalculus 5 credits
  OR MATH180-Calculus 1 5 credits
  OR MATH183-Calculus II 5 credits

Support Course Requirements

Pre-Physical Therapy Assistant AS - Support Course Requirements
Type
Completion Requirement

Category 4: Social Sciences

Complete ALL of the following Courses:
- PSY131-Introductory Psychology 3 credits

Category 3: Mathematics

Complete at least 1 of the following courses:
- MATH115-College Algebra 5 credits
  OR MATH165-Mathematics for Calculus 6 credits
  OR MATH175-Precalculus 5 credits
  OR MATH180-Calculus 1 5 credits
  OR MATH183-Calculus II 5 credits

General Education Requirements

Pre-Physical Therapy Assistant AS - General Education Course Requirements
Type
Completion Requirement

Category 2: English Composition or Communications

Complete any one, from the General Education Requirements for Transfer Degrees (MTA) list.

Complete at least 1 courses in the following course sets:
- CAT2 - Gen Ed Transfer - 2020

Category 5: Humanities and Fine Arts

Complete any two, from different disciplines, from the General Education Requirements for Transfer Degrees (MTA) list.

Complete at least 2 courses in the following course sets:
- CAT5 - Gen Ed Transfer - 2025

Category 6: Natural Sciences

Complete any one, from the General Education Requirements for Transfer Degrees (MTA) list.

Complete at least 1 courses in the following course sets:
- CAT6 - Transfer - Lec and Lab - 2025
- CAT6 - Transfer - Lec Only - 2020
- CAT6 - Gen Ed Transfer - Lab Only - 2020

Additional Comments:
See General Education Requirements for Transfer Degrees for details.

PRERADIOGRAPHER - Pre-Radiographer

Program Information

Program Title
Pre-Radiographer AS Degree

Program Code
PRERADIOGRAPHER

Degree Type
Associate in Science

Minimum Credits for Program Completion
60

Program Eligible for Financial Aid?
Yes

Subject
Radiographer Technologist

Semesters to Complete Program
4

Program Description
Provides students with the general academic background to be successful in their chosen health care field. For students pursuing admission to the [Radiographer](/programs/radiographer-associate-ap plied-science) program, please follow these steps:

1. Apply to the Radiographer (RAD) program at the Health Careers Admissions Process site. **Students are strongly urged to meet with the Health Careers Student Success Navigator located in the Welcome Center Advising area within the first semester of course work.**

2. Complete the [Radiographer](/programs/radiographer-associate-ap plied-science) program admission requirements. a. College GPA of at least 2.50 or higher for the last 12 academic credits, excluding lower than 100-level courses, HPE activity, studio and performance classes (if applicable). b. ACCUPLACER Reading score of 80 or better. c. Eligible for placement into ENG 131. d. [MATH-100: Basic Technical Mathematics](/courses/math-100) or higher with a C grade or better. e. [BIO-233: Anatomy and Physiology I](/courses/bio-233), with a C grade or better. f. [AH-100: Medical Terminology](/courses/ah-100), with a C grade or better.

Contact the Health Careers Student Success Navigator to confirm completion of steps 1 & 2 and placement on the qualified list.

While on the qualified list, complete as many of the required support courses as possible in the [Radiographer](/programs/radiographer-associate-ap plied-science) program, This degree does **NOT** have to be completed to be eligible for admission / entry to the [Radiographer](/programs/radiographer-associate-ap plied-science) program. Only program admission requirements must be completed to be placed on the qualified list and begin the program when the next open seat occurs and final approval has been given by the RAD Program Director.

Faculty Contact
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Faculty Contact Phone
313-317-6575

Faculty Contact Office Location
G-132A

School
Health & Human Services

Academic Department
Health Careers, Education, and Human Services

Program Learning Outcomes

Civil Society and Culture: Compare and contrast the United States globally with other nations or regions, addressing one or both of the following: (1) social, economic, political and cultural issues or (2) patterns of diversity or inequality, including racial, ethnic, religious or gender differences.

Communication: Effectively communicate ideas appropriate to their discipline using Standard English, through written and verbal communication.

Computer Technology: Demonstrate skills for computer technology, including internet, network and advanced file operations. Skills will include organizing, managing, and presenting data using office productivity software. Students will also identify security and integrity threats and identify unethical actions within their social or professional environments.

Critical Thinking/Information Literacy: Demonstrate the ability to analyze and evaluate information and identify the need for research to draw conclusions, formulate inferences, solve problems and make decisions. Students will also demonstrate information literacy skills by locating, evaluating, selecting, organizing, synthesizing, and ethically documenting information from multiple sources using both informal and formal formats, as appropriate for diverse writing situations.

Quantitative Literacy: Apply quantitative skills to analyze situations and make decisions in a variety of contexts.

What Classes do I take?

2-Year Plan
Pre-Radiographer - AS: Recommended Sequence - Current
Total Credits
60 - 63
Description
Enrollment Status: Full Time

If you have questions about the order in which you should take these courses, or the availability of these courses, please contact your advisor or the faculty contact listed below.

Program Contact Information

Office Contact: School of Health and Human Services: 313-845-9877, hhsinfo@hfcc.edu, Health Careers Education Ctr, Room: G-132

Faculty Contact: Cynthia Scheuer: 313-317-6575, cscheuer@hfcc.edu, Health Careers Education Ctr, Room: G-132A

For students in an older version of this program, please visit Henry Ford College Catalog Archive to view required courses.

Year	Semester	Semester Credits
Year 1	Fall	15 - 17

Courses
- AH100 - Medical Terminology

Semester Credits 4
Contact Hours 62

Courses
- BIO233 - Anatomy and Physiology I

Semester Credits 4
Contact Hours 77

Courses
- ENG131 - Introduction to College Writing

Semester Credits 3
Contact Hours 47

Courses
- MATH100 - Basic Technical Mathematics
  OR
- MATH101 - Mathematics for Health Careers
  OR
- MATH103 - Technical Mathematics
  OR
- MATH104 - Mathematics for Food Service Careers
  OR
- MATH110 - Intermediate Algebra
  OR
- MATH115 - College Algebra
  OR
- MATH131 - Mathematics for the Modern World
  OR
- MATH141 - Introduction to Statistics
  OR
- MATH165 - Mathematics for Calculus
  OR
- MATH175 - Precalculus
  OR
- MATH180 - Calculus I
  OR
- MATH183 - Calculus II
  OR
- MATH275 - Discrete Mathematics
  OR
- MATH280 - Calculus III
  OR
- MATH288 - Differential Equations

Semester Credits 4 - 6
Contact Hours 62 - 92

Year	Semester	Semester Credits
Year 1	Winter	13

Courses
- BIO234 - Anatomy and Physiology II

Semester Credits 4
Contact Hours 77

Courses
- HCS131 - Computers in Health Care

Semester Credits 3
Contact Hours 47

Courses
- Social Science: Complete one Political Science (POLS) or Sociology (SOC) course. (Generic)

Semester Credits 3
Contact Hours 47

Courses
- CAT2 - Gen Ed Transfer - 2020

Semester Credits 3
Contact Hours 47

Year	Semester	Semester Credits
Year 2	Fall	16

Courses
- PSY131 - Introductory Psychology

Semester Credits 3
Contact Hours 47

Courses
- CAT5 - Gen Ed Transfer - 2025

Semester Credits 3
Contact Hours 47

Courses
- CAT6 - Transfer - Lec and Lab - 2025
  OR
- CAT6 - Transfer - Lec Only - 2020
  OR
- CAT6 - Gen Ed Transfer - Lab Only - 2020

Semester Credits 4
Contact Hours 62

Courses
- Electives: Complete additional 100-level, or higher, credits to complete this degree. (Generic)

Semester Credits 6
Contact Hours 94

Year	Semester	Semester Credits
Year 2	Winter	16 - 17

Courses
- CAT5 - Gen Ed Transfer - 2025

Semester Credits 3
Contact Hours 47

Courses
- MATH115 - College Algebra
  OR
- MATH165 - Mathematics for Calculus
  OR
- MATH175 - Precalculus
  OR
- MATH180 - Calculus I
  OR
- MATH183 - Calculus II

Semester Credits
5 - 6
Contact Hours
77 - 92

Courses
- Category 6: Natural Sciences: Complete any one, at least one other than BIO, to reach 7 natural science credits. (Generic)
  OR
- CAT6 - Transfer - Lec and Lab - 2025
  OR
- CAT6 - Transfer - Lec Only - 2020
  OR
- CAT6 - Gen Ed Transfer - Lab Only - 2020

Semester Credits
3
Contact Hours
47

Courses
- Electives: Complete additional 100-level, or higher, credits to complete this degree. (Generic)

Semester Credits
5
Contact Hours
77

Program Requirements

Minimum Credits for Program Completion
60

Minimum GPA required for Graduation
2.000

HFC Credit Hour Residency Requirement
20

Simple Requisites

Core Course Requirements

Pre-Radiographer AS - Core Course Requirements
Type
Completion Requirement

Complete ALL of the following Courses:
- AH100-Medical Terminology 4 credits
- BIO233-Anatomy and Physiology I 4 credits
- BIO234-Anatomy and Physiology II 4 credits
- ENG131-Introduction College Writing 3 credits
- HCS131-Computers in Health Care 3 credits

Category 4: Social Science

Complete one Political Science (POLS) or Sociology (SOC) course.

Earn at least 3 credits

Category 3: Mathematics

Complete at least 1 of the following courses:
- MATH100-Basic Tech Mathematics 4 credits
  OR MATH101-Math for Health Career 4 credits
  OR MATH103-Technical Mathematics 4 credits
  OR MATH104-Math for Food Service Careers 4 credits
  OR
  OR MATH110-Intermediate Algebra 4 credits
  OR MATH115-College Algebra 5 credits
  OR MATH131-Math for the Modern World 4 credits
  OR MATH141-Introduction to Statistics 4 credits
  OR
  OR MATH165-Mathematics for Calculus 6 credits
  OR MATH175-Precalculus 5 credits
  OR MATH180-Calculus 1 5 credits
  OR MATH183-Calculus II 5 credits
  OR MATH275-Discrete Mathematics 4 credits
  OR MATH280-Calculus III 5 credits
  OR MATH288-Differential Equations 5 credits

Support Course Requirements

Pre-Radiographer AS - Support Course Requirements
Type
Completion Requirement

Category 3: Mathematics

Complete at least 1 of the following courses:
- MATH115-College Algebra 5 credits
  OR MATH165-Mathematics for Calculus 6 credits
  OR MATH175-Precalculus 5 credits
  OR MATH180-Calculus 1 5 credits
  OR MATH183-Calculus II 5 credits

Category 4: Social Sciences

Complete ALL of the following Courses:
- PSY131-Introductory Psychology 3 credits

Electives

Earn at least 11 credits

General Education Requirements

Pre-Radiographer AS - General Education Course Requirements
Type
Completion Requirement

Category 2: English Composition or Communications

Complete any one, from the General Education Requirements for Transfer Degrees (MTA) list.

Complete at least 1 courses in the following course sets:
- CAT2 - Gen Ed Transfer - 2020

Category 5: Humanities and Fine Arts

Complete any two, from different disciplines, from the General Education Requirements for Transfer Degrees (MTA) list.

Complete at least 2 courses in the following course sets:
- CAT5 - Gen Ed Transfer - 2025

Category 6: Natural Sciences

Complete 7 credit hours, at least one non-Biology, from the General Education Requirements for Transfer Degrees (MTA) list.

Earn at least 7 credits from the following:
- CAT6 - Transfer - Lec and Lab - 2025
- CAT6 - Transfer - Lec Only - 2020
- CAT6 - Gen Ed Transfer - Lab Only - 2020

Additional Comments:
See General Education Requirements for Transfer Degrees for details.

PRERESPTHERAPY - Pre-Respiratory Therapist

Program Information

Program Title
Pre-Respiratory Therapist AS Degree

Program Code
PRERESPTHERAPY

Degree Type
Associate in Science

Minimum Credits for Program Completion
60

Program Eligible for Financial Aid?
Yes

Subject
Respiratory Therapy

Semesters to Complete Program
4

Program Description
Provides students with the general academic background to be successful in their chosen health care field. For students pursuing admission to the [Respiratory Therapist](/programs/respiratory-therapist-associate-applied-science) program, please follow these steps:

1. Apply to the Respiratory Therapist program at the Health Careers Admissions Process site.
Students are strongly urged to meet with a health careers student success navigator (advisor) within the first semester of course work.

2. Complete the [Respiratory Therapist](/programs/respiratory-therapist-associate-applied-science) program admission requirements.
a. College GPA of at least 2.70 or higher for a minimum of 12 academic credits, excluding lower than 100 level courses.
b. ACCUPLACER Reading Score of 80 or better.
c. Eligible for placement into ENG 131.
d. Eligible for placement into MATH 110.
e. [AH-100](/courses/ah-100), with a C grade or better.
f. [BIO-233](/courses/bio-233), with a C grade or better.
g. [CHEM-131](/courses/chem-131), with a C grade or better.

Contact the Health Careers Student Success Navigator to confirm completion of steps 1 & 2 and placement on the qualified list.

While on the qualified list complete as many of the required program support courses as possible in the [Respiratory Therapist](/programs/respiratory-therapist-associate-applied-science) program. This degree does **NOT** have to be completed to be eligible for admission / entry to the [Respiratory Therapist](/programs/respiratory-therapist-associate-applied-science) program. Only program admission requirements must be completed to be placed on the qualified list and begin the program when the next open seat occurs and final approval has been given by the Respiratory Therapist Program Director.

Faculty Contact
Kim Najarian

Faculty Contact Email
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Faculty Contact Phone
313-317-6812

Faculty Contact Office Location
G-133F

School
Health & Human Services

Academic Department
Health Careers, Education, and Human Services

Program Learning Outcomes

Civil Society and Culture: Compare and contrast the United States globally with other nations or regions, addressing one or both of the following: (1) social, economic, political and cultural issues or (2) patterns of diversity or inequality, including racial, ethnic, religious or gender differences.

Communication: Effectively communicate ideas appropriate to their discipline using Standard English, through written and verbal communication.

Computer Technology: Demonstrate skills for computer technology, including internet, network and advanced file operations. Skills will include organizing, managing, and presenting data using office productivity software. Students will also identify security and integrity threats and identify unethical actions within their social or professional environments.

Critical Thinking/Information Literacy: Demonstrate the ability to analyze and evaluate information and identify the need for research to draw conclusions, formulate inferences, solve problems and make decisions. Students will also demonstrate information literacy skills by locating, evaluating, selecting, organizing, synthesizing, and ethically documenting information from multiple sources using both informal and formal formats, as appropriate for diverse writing situations.

Quantitative Literacy: Apply quantitative skills to analyze situations and make decisions in a variety of contexts.

What Classes do I take?

2-Year Plan
Pre-Respiratory Therapist - AS: Recommended Sequence - Current
Total Credits
60 - 62
Description
Enrollment Status: Full Time

If you have questions about the order in which you should take these courses, or the availability of these courses, please contact your advisor or the faculty contact listed below.

Program Contact Information

Office Contact: School of Health and Human Services: 313-845-9877, hhsinfo@hfcc.edu, Health Careers Education Ctr, Room: G-132

Faculty Contact: Kim Najarian: 313-317-6812, knajarian@hfcc.edu, Health Careers Education Ctr, Room: G-133F

For students in an older version of this program, please visit Henry Ford College Catalog Archive to view required courses.

Year	Semester	Semester Credits
Year 1	Fall	15 - 16

Courses
- AH100 - Medical Terminology

Semester Credits 4
Contact Hours 62

Courses
- BIO233 - Anatomy and Physiology I

Semester Credits 4
Contact Hours 77

Courses
- ENG131 - Introduction to College Writing

Semester Credits 3
Contact Hours 47

Courses
- CHEM131 - Principles of Chemistry
  OR
- CHEM141 - Principles Gen & Inorganic Chemistry I

Semester Credits 4 - 5
Contact Hours 77 - 107

Year	Semester	Semester Credits
Year 1	Winter	15 - 16

Courses
- BIO234 - Anatomy and Physiology II

Semester Credits 4
Contact Hours 77

Courses
- HCS131 - Computers in Health Care

Semester Credits 3
Contact Hours 47

Courses
- MATH115 - College Algebra
  OR
- MATH165 - Mathematics for Calculus
  OR
- MATH175 - Precalculus
  OR
- MATH180 - Calculus I
  OR
- MATH183 - Calculus II

Semester Credits 5 - 6
Contact Hours 77 - 92

Courses
- Social Science: Complete one Political Science (POLS) or Sociology (SOC) course. (Generic)

Semester Credits 3
Contact Hours 47

Year	Semester	Semester Credits
Year 2	Fall	16

Courses
- PSY131 - Introductory Psychology

Semester Credits 3
Contact Hours 47

Courses
- CAT2 - Gen Ed Transfer - 2020

Semester Credits 3
Contact Hours 47

Courses
- CAT5 - Gen Ed Transfer - 2025

Semester Credits 3
Contact Hours 47

Courses
- CAT6 - Transfer - Lec and Lab - 2025
  OR
- CAT6 - Transfer - Lec Only - 2020
  OR
- CAT6 - Gen Ed Transfer - Lab Only - 2020

Semester Credits 4
Contact Hours 62

Courses
- Electives: Complete additional 100-level, or higher, credits to complete this degree. (Generic)

Semester Credits 3
Contact Hours 47

Year	Semester	Semester Credits
Year 2	Winter	14

Courses
- CAT5 - Gen Ed Transfer - 2025

Semester Credits 3
Contact Hours 47

Courses
- CAT6 - Transfer - Lec and Lab - 2025
  OR
- CAT6 - Transfer - Lec Only - 2020
  OR
- CAT6 - Gen Ed Transfer - Lab Only - 2020

Semester Credits 3
Contact Hours 47

Courses
- Electives: Complete additional 100-level, or higher, credits to complete this degree. (Generic)

Semester Credits
8
Contact Hours
124

Program Requirements

Minimum Credits for Program Completion
60

Minimum GPA required for Graduation
2.000

HFC Credit Hour Residency Requirement
20

Simple Requisites

Core Course Requirements

Pre-Respiratory Therapist AS - Core Course Requirements
Type
Completion Requirement

Complete ALL of the following Courses:
- AH100-Medical Terminology 4 credits
- BIO233-Anatomy and Physiology I 4 credits
- BIO234-Anatomy and Physiology II 4 credits

Complete at least 1 of the following courses:
- CHEM131-Principles of Chemistry 4 credits
  OR CHEM141-Prin Gen & Inorgan Chem I 5 credits

Complete ALL of the following Courses:
- ENG131-Introduction College Writing 3 credits
- HCS131-Computers in Health Care 3 credits

Social Sciences

Complete one Political Science (POLS) or Sociology (SOC) course.

Earn at least 3 credits

Support Course Requirements

Pre-Respiratory Therapist AS - Support Course Requirements
Type
Completion Requirement

Category 3: Mathematics

Complete at least 1 of the following courses:
- MATH115-College Algebra 5 credits
  OR MATH165-Mathematics for Calculus 6 credits
  OR MATH175-Precalculus 5 credits
  OR MATH180-Calculus 1 5 credits
  OR MATH183-Calculus II 5 credits

Category 4: Social Sciences

Complete ALL of the following Courses:
- PSY131-Introductory Psychology 3 credits

Electives

Earn at least 11 credits

General Education Requirements

Pre-Respiratory Therapist AS - General Education Course Requirements
Type
Completion Requirement

Category 2: English Composition or Communications

Complete any one, from the General Education Requirements for Transfer Degrees (MTA) list.

Complete at least 1 courses in the following course sets:
- CAT2 - Gen Ed Transfer - 2020

Category 5: Humanities and Fine Arts

Complete any two, from different disciplines, from the General Education Requirements for Transfer Degrees (MTA) list.

Complete at least 2 courses in the following course sets:
- CAT5 - Gen Ed Transfer - 2025

Category 6: Natural Sciences

Complete any 7 credit hours, from the General Education Requirements for Transfer Degrees (MTA) list.

Earn at least 7 credits from the following:
- CAT6 - Transfer - Lec and Lab - 2025
- CAT6 - Transfer - Lec Only - 2020
- CAT6 - Gen Ed Transfer - Lab Only - 2020

Additional Comments:
See General Education Requirements for Transfer Degrees for details.

PRESURGTECH - Pre-Surgical Technologist

Program Information

Program Title
Pre-Surgical Technologist AS Degree

Program Code
PRESURGTECH

Degree Type
Associate in Science

Minimum Credits for Program Completion
60

Program Eligible for Financial Aid?
Yes

Subject
Surgical Technician

Semesters to Complete Program
4

Program Description
Provides students with the general academic background to be successful in their chosen health care field. For students pursuing admission to the [Surgical Technologist](/programs/surgical-technologist-associate-applied-science) program, please follow these steps:

1. Apply to the program. **Students are strongly urged to meet with a health careers advisor within the first semester of course work.**

2. Complete the [Surgical Technologist](/programs/surgical-technologist-associate-applied-science) program admission requirements.
a. College GPA of at least 2.50 or higher for a minimum of 12 academic credits, excluding lower than 100-level courses, HPE activity, studio and performance classes (if applicable).
b. ACCUPLACER Reading Score of 80 or better.
c. Eligible for placement into ENG 131.
d. Eligible for placement into MATH 080.
e. [BIO-233: Anatomy and Physiology I](/courses/bio-233) or college equivalent with a C grade or better.
f. Complete one of the following: [BIO-135](/courses/bio-135) OR [BIO-251](/courses/bio-251) with C or higher.

Contact the Health Careers Student Success Navigator to confirm completion of steps 1 & 2 and placement on the qualified list.

While on the qualified list complete as many of the required program support courses as possible in the [Surgical Technologist](/programs/surgical-technologist-associate-applied-science) program. This degree does **NOT** have to be completed to be eligible for admission / entry to the [Surgical Technologist](/programs/surgical-technologist-associate-applied-science) program. Only program admission requirements must be completed to be placed on the qualified list and begin the program when the next open seat occurs and final approval has been given by the Surgical Technologist Program Director.

Faculty Contact
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Faculty Contact Phone
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Faculty Contact Office Location
G-133K

School
Health & Human Services

Academic Department
Health Careers, Education, and Human Services

Program Learning Outcomes

Civil Society and Culture: Compare and contrast the United States globally with other nations or regions, addressing one or both of the following: (1) social, economic, political and cultural issues or (2) patterns of diversity or inequality, including racial, ethnic, religious or gender differences.

Communication: Effectively communicate ideas appropriate to their discipline using Standard English, through written and verbal communication.

Computer Technology: Demonstrate skills for computer technology, including internet, network and advanced file operations. Skills will include organizing, managing, and presenting data using office productivity software. Students will also identify security and integrity threats and identify unethical actions within their social or professional environments.

Critical Thinking/Information Literacy: Demonstrate the ability to analyze and evaluate information and identify the need for research to draw conclusions, formulate inferences, solve problems and make decisions. Students will also demonstrate information literacy skills by locating, evaluating, selecting, organizing, synthesizing, and ethically documenting information from multiple sources using both informal and formal formats, as appropriate for diverse writing situations.

Quantitative Literacy: Apply quantitative skills to analyze situations and make decisions in a variety of contexts.

What Classes do I take?

2-Year Plan
Pre-Surgical Technologist - AS: Recommended Sequence - 2025-26
Total Credits
60 - 64
Description
Enrollment Status: Full Time

If you have questions about the order in which you should take these courses, or the availability of these courses, please contact your advisor or the faculty contact listed below.

Program Contact Information

Office Contact: School of Health and Human Services: 313-845-9877, hhsinfo@hfcc.edu, Health Careers Education Ctr, Room: G-132

Faculty Contact: Julie Jackson: 313-845-9733, jjackson131@hfcc.edu, Health Careers Education Ctr, Room: G-133K

For students in an older version of this program, please visit Henry Ford College Catalog Archive to view required courses.

Year	Semester	Semester Credits
Year 1	Fall	14 - 15

Courses
- AH100 - Medical Terminology

Semester Credits	4
Contact Hours	62

Courses
- ENG131 - Introduction to College Writing

Semester Credits
3
Contact Hours
47

Courses
- BIO135 - Microbiology for Allied Health Sciences
  OR
- BIO251 - Microbiology

Semester Credits
4 - 5
Contact Hours
77 - 122

Courses
- Social Science: Complete one Political Science (POLS) or Sociology (SOC) course (Generic)

Semester Credits
3
Contact Hours
47

Year	Semester	Semester Credits
Year 1	Winter	14 - 16

Courses
- BIO233 - Anatomy and Physiology I

Semester Credits
4
Contact Hours
77

Courses
- HCS131 - Computers in Health Care

Semester Credits
3
Contact Hours
47

Courses
- MATH100 - Basic Technical Mathematics
  OR
- MATH101 - Mathematics for Health Careers
  OR
- MATH103 - Technical Mathematics
  OR
- MATH104 - Mathematics for Food Service Careers
  OR
- MATH110 - Intermediate Algebra
  OR
- MATH115 - College Algebra
  OR
- MATH131 - Mathematics for the Modern World
  OR
- MATH141 - Introduction to Statistics
  OR
- MATH165 - Mathematics for Calculus
  OR
- MATH175 - Precalculus
  OR
- MATH180 - Calculus I
  OR
- MATH183 - Calculus II
  OR
- MATH275 - Discrete Mathematics
  OR
- MATH280 - Calculus III
  OR
- MATH288 - Differential Equations

Semester Credits
4 - 6
Contact Hours
62 - 92

Courses
- CAT2 - Gen Ed Transfer - 2020

Semester Credits
3
Contact Hours
47

Year	Semester	Semester Credits
Year 2	Fall	16

Courses
- BIO234 - Anatomy and Physiology II

Semester Credits
4
Contact Hours
77

Courses
- PSY131 - Introductory Psychology

Semester Credits
3
Contact Hours
47

Courses
- CAT5 - Gen Ed Transfer - 2025

Semester Credits
3
Contact Hours
47

Courses
- Electives: Complete additional 100-level, or higher, credits to complete this degree. (Generic)

Semester Credits 6
Contact Hours 94

Year	Semester	Semester Credits
Year 2	Winter	16 - 17

Courses
- CAT5 - Gen Ed Transfer - 2025

Semester Credits 3
Contact Hours 3 - 6

Courses
- MATH115 - College Algebra
  OR
- MATH165 - Mathematics for Calculus
  OR
- MATH175 - Precalculus
  OR
- MATH180 - Calculus I
  OR
- MATH183 - Calculus II

Semester Credits 5 - 6
Contact Hours 77 - 92

Courses
- CAT6 - Transfer - Lec and Lab - 2025
  OR
- CAT6 - Transfer - Lec Only - 2020
  OR
- CAT6 - Gen Ed Transfer - Lab Only - 2020

Semester Credits 3
Contact Hours 47

Courses
- Electives: Complete additional 100-level, or higher, credits to complete this degree. (Generic)

Semester Credits 5
Contact Hours 77

2-Year Plan
Pre-Surgical Technologist - AS: Recommended Sequence - Current
Total Credits
60 - 64
Description
Enrollment Status: Full Time

If you have questions about the order in which you should take these courses, or the availability of these courses, please contact your advisor or the faculty contact listed below.

Program Contact Information

Office Contact: School of Health and Human Services: 313-845-9877, hhsinfo@hfcc.edu, Health Careers Education Ctr, Room: G-132

Faculty Contact: Julie Jackson: 313-845-9733, jjackson131@hfcc.edu, Health Careers Education Ctr, Room: G-133K

For students in an older version of this program, please visit Henry Ford College Catalog Archive to view required courses.

Year	Semester	Semester Credits
Year 1	Fall	14 - 15

Courses
- AH100 - Medical Terminology

Semester Credits 4
Contact Hours 62

Courses
- ENG131 - Introduction to College Writing

Semester Credits 3
Contact Hours 47

Courses
- BIO135 - Microbiology for Allied Health Sciences
  OR
- BIO251 - Microbiology

Semester Credits 4 - 5
Contact Hours 77 - 122

Courses
- Social Science: Complete one Political Science (POLS) or Sociology (SOC) course (Generic)

Semester Credits 3
Contact Hours 47

Year	Semester	Semester Credits
Year 1	Winter	14 - 16

Courses
- BIO233 - Anatomy and Physiology I

Semester Credits 4
Contact Hours 77

Courses
- HCS131 - Computers in Health Care

Semester Credits 3
Contact Hours 47

Courses
- MATH100 - Basic Technical Mathematics
  OR
- MATH101 - Mathematics for Health Careers
  OR
- MATH104 - Mathematics for Food Service Careers
  OR
- MATH110 - Intermediate Algebra
  OR
- MATH115 - College Algebra
  OR
- MATH131 - Mathematics for the Modern World
  OR
- MATH141 - Introduction to Statistics
  OR
- MATH165 - Mathematics for Calculus
  OR
- MATH175 - Precalculus
  OR
- MATH180 - Calculus I
  OR
- MATH183 - Calculus II
  OR
- MATH275 - Discrete Mathematics
  OR
- MATH280 - Calculus III
  OR
- MATH288 - Differential Equations

Semester Credits
4 - 6
Contact Hours
62 - 92

Courses
- CAT2 - Gen Ed Transfer - 2020

Semester Credits
3
Contact Hours
47

Year	Semester	Semester Credits
Year 2	Fall	16

Courses
- BIO234 - Anatomy and Physiology II

Semester Credits
4
Contact Hours
77

Courses
- PSY131 - Introductory Psychology

Semester Credits
3
Contact Hours
47

Courses
- CAT5 - Gen Ed Transfer - 2025

Semester Credits
3
Contact Hours
47

Courses
- Electives: Complete additional 100-level, or higher, credits to complete this degree. (Generic)

Semester Credits
6
Contact Hours
94

Year	Semester	Semester Credits
Year 2	Winter	16 - 17

Courses
- CAT5 - Gen Ed Transfer - 2025

Semester Credits
3
Contact Hours
3 - 6

Courses
- MATH115 - College Algebra
  OR
- MATH165 - Mathematics for Calculus
  OR
- MATH175 - Precalculus
  OR
- MATH180 - Calculus I
  OR
- MATH183 - Calculus II

Semester Credits
5 - 6
Contact Hours
77 - 92

Courses
- CAT6 - Transfer - Lec and Lab - 2025
  OR
- CAT6 - Transfer - Lec Only - 2020
  OR
- CAT6 - Gen Ed Transfer - Lab Only - 2020

Semester Credits
3
Contact Hours
47

Courses
- Electives: Complete additional 100-level, or higher, credits to complete this degree. (Generic)

Semester Credits 5
Contact Hours 77

Program Requirements

Minimum Credits for Program Completion
60
Minimum GPA required for Graduation
2.000
HFC Credit Hour Residency Requirement
20

Simple Requisites

Core Course Requirements

Pre-Surgical Technologist AS - Core Course Requirements
Type
Completion Requirement

Complete ALL of the following Courses:
- AH100-Medical Terminology 4 credits
- BIO233-Anatomy and Physiology I 4 credits
- BIO234-Anatomy and Physiology II 4 credits

Microbiology

Complete at least 1 of the following courses:
- BIO135-Microbiology for AHS 4 credits
  OR BIO251-Microbiology 5 credits

Complete ALL of the following Courses:
- ENG131-Introduction College Writing 3 credits
- HCS131-Computers in Health Care 3 credits

Social Science: Complete one Political Science (POLS) or Sociology (SOC) course.

Earn at least 3 credits

Category 3: Mathematics

Complete at least 1 of the following courses:
- MATH100-Basic Tech Mathematics 4 credits
  OR MATH101-Math for Health Career 4 credits
  OR MATH103-Technical Mathematics 4 credits
  OR MATH104-Math for Food Service Careers 4 credits
  OR
  OR MATH110-Intermediate Algebra 4 credits
  OR MATH115-College Algebra 5 credits
  OR MATH131-Math for the Modern World 4 credits
  OR MATH141-Introduction to Statistics 4 credits
  OR
  OR MATH165-Mathematics for Calculus 6 credits
  OR MATH175-Precalculus 5 credits
  OR MATH180-Calculus 1 5 credits
  OR MATH183-Calculus II 5 credits
  OR MATH275-Discrete Mathematics 4 credits
  OR MATH280-Calculus III 5 credits
  OR MATH288-Differential Equations 5 credits

Support Course Requirements

Pre-Surgical Technologist AS - Support Course Requirements
Type
Completion Requirement

Category 3: Mathematics

Complete at least 1 of the following courses:
- MATH115-College Algebra 5 credits
  OR MATH165-Mathematics for Calculus 6 credits
  OR MATH175-Precalculus 5 credits
  OR MATH180-Calculus 1 5 credits
  OR MATH183-Calculus II 5 credits

Category 4: Social Sciences

Complete ALL of the following Courses:
- PSY131-Introductory Psychology 3 credits

Electives

Earn at least 11 credits

General Education Requirements

Pre-Surgical Technologist AS - General Education Course Requirements
Type
Completion Requirement

Category 2: English Composition or Communications

Complete any one, from the General Education Requirements for Transfer Degrees (MTA) list.

Complete at least 1 courses in the following course sets:
- CAT2 - Gen Ed Transfer - 2020

Category 5: Humanities and Fine Arts

Complete any two, from different disciplines, from the General Education Requirements for Transfer Degrees (MTA) list.

Complete at least 2 courses in the following course sets:
- CAT5 - Gen Ed Transfer - 2025

Category 6: Natural Sciences

Complete any one from a different discipline other than BIO, from the General Education Requirements for Transfer Degrees (MTA) list.

Complete ALL of the following Course Sets:
- CAT6 - Transfer - Lec and Lab - 2025
- CAT6 - Transfer - Lec Only - 2020
- CAT6 - Gen Ed Transfer - Lab Only - 2020

Additional Comments:
See General Education Requirements for Transfer Degrees for details.

PSCED.AA - Pre-Secondary Education

Program Information

Program Title
Pre-Secondary Education AA Degree

Program Code
PSCED.AA

Degree Type
Associate in Arts

Minimum Credits for Program Completion
60

Program Eligible for Financial Aid?
Yes

Subject
Pre-Education

Semesters to Complete Program
4

Program Description
Designed for individuals seeking teacher certification in Secondary Education. This degree focuses on teaching in grades 7-12. Students in this program complete General Education requirements, early professional preparation courses, and begin course work in their teaching majors and minors. Transfer to and completion of a four-year university teacher preparation program is necessary for full teacher certification. Students are advised to consult transfer guides for the school to which they intend to transfer when selecting courses.

Faculty Contact
Carolyn Casale

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Faculty Contact Phone
313-317-6580

Faculty Contact Office Location
G-133D

Academic Advisor
Hannah Doederlein

Academic Advisor Contact Email
hrdoederlein@hfcc.edu

Academic Advisor Contact Phone
313-317-6868

Academic Advisor Office Location
G-203A

School
Health & Human Services

Academic Department
Health Careers, Education, and Human Services

Admissions Requirements

Admissions Requirements
The law requires new teachers, school administrators, school psychologists, and other personnel to provide documentation of a completed criminal record check. Students who complete field experiences as part of their HFC course work must provide a statewide criminal record check prior to working with children in public or non-public schools.

Program Learning Outcomes

Apply current educational theories and practices to a classroom setting.

Apply content knowledge to development of lessons to be taught in grades 5-9 and 7-12.

Apply knowledge of the physical, emotional, intellectual, and social development theories of the learner in a school setting.

Apply knowledge of the exceptionalities, learning environments, and laws as they relate to secondary education programs.

Develop lesson plans implementing educational software for grades 5-9 and 7-12.

What Classes do I take?

2-Year Plan
Pre-Secondary Education: Recommended Sequence - Current
Total Credits
60 - 66
Description
Enrollment Status: Full Time

If you have questions about the order in which you should take these courses, or the availability of these courses, please contact your advisor or the faculty contact listed below.

Program Contact Information

Office Contact: School of Health and Human Services: 313-845-9877, hhsinfo@hfcc.edu, Health Careers Education Ctr, Room: G-132

Faculty Contact: Carolyn Casale: 313-317-6580, ccasale@hfcc.edu, Health Careers Education Ctr, Room: G-133D

Academic Advisor: Hannah Doederlein: 313-317-6868, hrdoederlein@hfcc.edu, Health Careers Bldg, Room: G-203A

For students in an older version of this program, please visit Henry Ford College Catalog Archive to view required courses.

Year	Semester	Semester Credits
Year 1	Fall	16 - 17

Courses
- ENG131 - Introduction to College Writing

Semester Credits
3
Contact Hours
47

Courses
- PSY131 - Introductory Psychology

Semester Credits
3
Contact Hours
47

Courses
- CIS221 - Instructional Tech Educators (Pre K-12)

Semester Credits
3
Contact Hours
47

Courses
- CAT3 - Coll Algebra - Gen Ed Transfer - 2020
  OR
- CAT3 - Quant Lit - Gen Ed Transfer - 2025
  OR
- CAT3 Stats - Gen Ed Transfer - 2025

Semester Credits 4
Contact Hours 62

Courses
- CAT6 - Transfer - Lec and Lab - 2025
  OR
- CAT6 - Transfer - Lec Only - 2020
  OR
- CAT6 - Gen Ed Transfer - Lab Only - 2020

Semester Credits 3 - 4
Contact Hours 47 - 77

Year	Semester	Semester Credits
Year 1	Winter	12 - 13

Courses
- ENG132 - College Writing and Research

Semester Credits 3
Contact Hours 47

Courses
- EDU250 - Humanities & Performing Arts Educators

Semester Credits 3
Contact Hours 47

Courses
- CAT6 - Transfer - Lec and Lab - 2025
  OR
- CAT6 - Transfer - Lec Only - 2020
  OR
- CAT6 - Gen Ed Transfer - Lab Only - 2020

Semester Credits 3 - 4
Contact Hours 47 - 77

Courses
- EDU296 - Exceptional Child

Semester Credits 3
Contact Hours 47

Year	Semester	Semester Credits
Year 2	Fall	15 - 18

Courses
- EDU256 - Educational Psychology

Semester Credits 3
Contact Hours 47

Courses
- Select appropriate course from content area (Generic)

Semester Credits 3 - 4
Contact Hours 47 - 77

Courses
- CAT5 - Gen Ed Transfer - 2025

Semester Credits 3
Contact Hours 47

Courses
- Select appropriate course from content area (Generic)

Semester Credits 3 - 4
Contact Hours 47 - 62

Courses
- Select appropriate course from content area (Generic)

Semester Credits 3 - 4
Contact Hours 47 - 62

Year	Semester	Semester Credits
Year 2	Winter	17 - 18

Courses
- EDU298 - Foundations of Educ With Pract Exp

Semester Credits 4
Contact Hours 62

Courses
- Select appropriate course from content area. Consult your pre-education advisor and transfer institution academic advisor, for transfer institution major/minor requirements (Generic)

Semester Credits 13 - 14
Contact Hours 203 - 218

2-Year Plan
Pre-Secondary Education: Recommended Sequence 2022-2023 Revised
Total Credits
76
Description
Enrollment Status: Full Time

If you have questions about the order in which you should take these courses, or the availability of these courses, please contact your advisor or the faculty contact listed below.

Program Contact Information

Office Contact: School of Health and Human Services: 313-845-9877, hhsinfo@hfcc.edu, Health Careers Education Ctr, Room: G-132

Faculty Contact: Carolyn Casale: 313-317-6580, ccasale@hfcc.edu, Health Careers Education Ctr, Room: G-133D

Academic Advisor: Hannah Doederlein: 313-317-6868, hrdoederlein@hfcc.edu, Health Careers Bldg, Room: G-203A

For students in an older version of this program, please visit Henry Ford College Catalog Archive to view required courses.

Year	Semester	Semester Credits
Year 1	Fall	16

Courses
- ENG131 - Introduction to College Writing

Semester Credits
3
Contact Hours
47

Courses
- PSY131 - Introductory Psychology

Semester Credits
3
Contact Hours
47

Courses
- CIS221 - Instructional Tech Educators (Pre K-12)

Semester Credits
3
Contact Hours
47

Courses
- CAT3 - Coll Algebra - Gen Ed Transfer - 2020
  OR
- CAT3 - Quant Lit - Gen Ed Transfer - 2025
  OR
- CAT3 Stats - Gen Ed Transfer - 2025

Semester Credits
4
Contact Hours
62

Courses
- Electives: Complete additional 100-level, or higher, credits to complete this degree. (Generic)

Semester Credits
3
Contact Hours
47

Year	Semester	Semester Credits
Year 1	Winter	12

Courses
- ENG132 - College Writing and Research

Semester Credits
3
Contact Hours
47

Courses
- CAT5 - Gen Ed Transfer - 2025

Semester Credits
3
Contact Hours
47

Courses
- CAT6 - Transfer - Lec and Lab - 2025
  OR
- CAT6 - Transfer - Lec Only - 2020
  OR
- CAT6 - Gen Ed Transfer - Lab Only - 2020

Semester Credits
3
Contact Hours
47

Courses
- Electives: Complete additional 100-level, or higher, credits to complete this degree. (Generic)

Semester Credits
3
Contact Hours
47

Year	Semester	Semester Credits
Year 2	Fall	13

Courses
- EDU250 - Humanities & Performing Arts Educators

Semester Credits
3
Contact Hours
47

Courses
- EDU256 - Educational Psychology

Semester Credits
3
Contact Hours
47

Courses
- CAT6 - Transfer - Lec and Lab - 2025
  OR
- CAT6 - Transfer - Lec Only - 2020
  OR
- CAT6 - Gen Ed Transfer - Lab Only - 2020

Semester Credits 4
Contact Hours 62

Courses
- Electives: Complete additional 100-level, or higher, credits to complete this degree. (Generic)

Semester Credits 3
Contact Hours 47

Year	Semester	Semester Credits
Year 2	Winter	35

Courses
- EDU201 (inactive) (Generic)

Semester Credits 3
Contact Hours 47

Courses
- EDU202 (inactive) (Generic)

Semester Credits 3
Contact Hours 47

Courses
- EDU296 - Exceptional Child

Semester Credits 3
Contact Hours 47

Courses
- Consult your pre-education advisor and transfer institution academic advisor, for transfer institution major/minor requirements. (Generic)

Semester Credits 26
Contact Hours 416

Program Requirements

Minimum Credits for Program Completion
60

Minimum GPA required for Graduation
2.000

HFC Credit Hour Residency Requirement
20

Simple Requisites

Core Course Requirements

Pre-Secondary Education AA - Core Course Requirements
Type
Completion Requirement

Complete ALL of the following Courses:
- EDU250-Humanities/Perform Art Educat 3 credits
- EDU256-Educational Psychology 3 credits
- EDU296-Exceptional Child 3 credits
- EDU298-Found of Educ With Pract Exp 4 credits
- CIS221-Instruction Tech for Educators 3 credits

Consult your pre-education advisor and transfer institution academic advisor, for transfer institution major/minor requirements.

Support Course Requirements

Pre-Secondary Education AA - Support Course Requirements
Type
Completion Requirement

Complete ALL of the following Courses:
- ENG131-Introduction College Writing 3 credits
- ENG132-College Writing and Research 3 credits
- PSY131-Introductory Psychology 3 credits

Choose one of the following content area pathways:

Math 5 - 9

Consult your pre-education advisor and transfer institution academic advisor, for transfer institution major/minor requirements. Take additional 21 credits from the General Education Requirements for Transfer Degrees (MTA) Category 3 Algebra track.

Complete ALL of the following Courses:
- MATH115-College Algebra 5 credits

Math 7 - 12

Consult your pre-education advisor and transfer institution academic advisor, for transfer institution major/minor requirements. Take additional 21 credits from the General Education Requirements for Transfer Degrees (MTA) Category 3 Algebra track.

Complete ALL of the following Courses:
- MATH175-Precalculus 5 credits

English 5 - 9 and 7 - 12

Consult your pre-education advisor and transfer institution academic advisor, for transfer institution major/minor requirements.

- Complete any MATH course from the General Education Requirements for Transfer Degrees (MTA) list.
- Complete 18 additional credit hours from the following list: ENG139 Creative Writing, ENG231 Intro to Literature, ENG232 Intro to the Short Story, ENG235 Amer Literature Before 1900, ENG237 American Literature Since 1900, ENG241 Shakespeare, ENG243 Women's Literature, ENG246 Intro to Children's Literature

Complete ALL of the following Courses:
- ENG248-African American Literature 3 credits

Social Studies 5 - 9 and 7 - 12

Consult your pre-education advisor and transfer institution academic advisor, for transfer institution major/minor requirements.

- Complete any MATH course from the General Education Requirements for Transfer Degrees (MTA) list.

- Complete 21 additional credit hours from the following list: POLS131 Intro Amer Gov't & Pol Sci, GEOG132 World Regional Geography, HIST111 Ancient World History or HIST112 Medieval-Early Modern World, HIST113 Modern Wrld History, HIST151 Early American History, HIST152 Modern American History, HIST254 History of Michigan, BEC151 Prin Macro Economics, BEC152 Prin Micro Economics

Science 5 - 9 and 7 - 12

Consult your pre-education advisor and transfer institution academic advisor, for transfer institution major/minor requirements.

- Complete one course from General Education Requirements for Transfer Degrees (MTA) Category 3 Algebra track
- Complete 21 additional credit hours of Science from the following list: BIO150 Bio: Organisms, Genes, Ecology, BIO152 Cell and Molecular Biology, BIO135 Microbiology for AHS or BIO251 Microbiology, CHEM141 Prin Gen & Inorgan Chem I, CHEM241 Organic Chemistry I and CHEM243 Microscale Organic Chem Lab I, CHEM242 Organic Chemistry II and CHEM244 MicroscaleOrganic Chem Lab II, GEOL131 Physical Geology, PHYS131 General Physics I, PHYS132 General Physics II, ASTR131 Descriptive Astronomy, ASTR133 Introductory Astronomy Lab

General Education Requirements

Pre-Secondary Education AA - General Education Course Requirements
Type
Completion Requirement

Category 5: Humanities and Fine Arts

Complete any one course from the General Education Requirements for Transfer Degrees (MTA) list.

Complete at least 1 courses in the following course sets:

- CAT5 - Gen Ed Transfer - 2025

Category 6: Natural Sciences

Complete at least 2 courses in the following course sets:

- CAT6 - Transfer - Lec and Lab - 2025
- CAT6 - Transfer - Lec Only - 2020
- CAT6 - Gen Ed Transfer - Lab Only - 2020

Additional Comments:
See General Education Requirements for Transfer Degrees for details.

PTAST.AAS - Physical Therapist Assistant

Program Information

Program Title
Physical Therapy Assistant AAS Degree

Program Code
PTAST.AAS

Degree Type
Associate in Applied Science

Minimum Credits for Program Completion
68

Program Eligible for Financial Aid?
Yes

Subject
Physical Therapy Assistant

Semesters to Complete Program
6

Program Description
Prepares individuals for employment as entry-level Physical Therapist Assistants. Students in this program will have learning experiences in the classroom, laboratory and in local physical therapy facilities. The final semester is spent in full-time (40 hrs/week) clinical externships.

Program Accreditation Information
The Physical Therapist Assistant Program at Henry Ford College is accredited by the Commission on Accreditation in Physical Therapy Education (CAPTE), 3030 Potomac Ave., Suite 100, Alexandria Virginia 22305-3085; telephone: 703-706-3245; email: accreditation@apta.org; website: http://www.capteonline.org. If needing to contact the program/institution directly, please call 313-317-6576 or email sepedley@hfcc.edu.

Faculty Contact
Stephen Pedley

Faculty Contact Email
sepedley@hfcc.edu

Faculty Contact Phone
313-317-6576

Faculty Contact Office Location
G-133H

Academic Advisor
Samer Atris

Academic Advisor Contact Email
satris1@hfcc.edu

Academic Advisor Contact Phone
313-317-6862

Academic Advisor Office Location
G-203C

School
Health & Human Services

Academic Department
Health Careers, Education, and Human Services

Admissions Requirements

Admissions Requirements
Students who meet all admission requirements are considered qualified and are admitted to the program once per year in the fall semester on a "first-qualified, first-admitted" basis. Acceptance into the college does not constitute nor guarantee admission to the program. Final approval to enroll in the program comes from the Physical Therapy Assistant AAS Degree Director.

Program Admission Requirements

1. College GPA of at least 2.80 or higher for a minimum of 12 academic credits excluding lower than 100 level courses.
2. Accuplacer Next Gen (250+) Reading Score.
3. Successful completion of BIO233 Anatomy and Physiology I or equivalent, with a B- or better, within five years of admission.*
4. Successful completion of PSY131 Introductory Psychology, or equivalent, with a C or better.
5. Successful completion of MATH110 Intermediate Algebra or higher with a C or better, or Accuplacer Next Gen QAS (255+), or ARITHANG (225+).
6. Successful completion of AH132 Intro to Healthcare Profession, with a C or better.
7. Twenty hours or more of observation in a physical therapy setting observing a PTA at work with a letter of confirmation from the supervisory PT or PTA or complete an essay on the roles and responsibilities of a PTA. The assignment for the essay can be obtained from the PTA Program Advisor, Samer Atris (submit either document to the PTA Program Advisor, Samer Atris via email at satris1@hfcc.edu or in person to G-203).

*There may be other pre-admission coursework the student needs to complete based on results of placement tests and/or high school coursework.

The Program Admission Process

Our Health Career programs are limited enrollment programs with specific admission requirements. In order to get on the qualified list, you must complete the Health Careers Physical Therapist Assistant (PTA) application found at the Health Careers Admissions Process site and all the PTA admission requirements. It is recommended that students interested in a health career meet with the Health Careers Student Program Advisor located in the Health Careers building G in room G-203 on the second floor. Make an appointment with the Health Careers Student Program Advisor early in your planning process. This will allow you to discuss program options and create an academic plan to qualify for the selected program.

Due to the number of credit hours required for program completion and the intensity of the program, students are encouraged to complete as many of the Required Support Courses as possible prior to entering the program. The first courses that a student should complete are those required for program admission followed by the other Required Support Courses.

Courses Required for Program Admission
BIO233 - Anatomy and Physiology I, PSY131 - Introductory Psychology, AH132 - Introduction to Healthcare Professions

Program Learning Outcomes

Demonstrate the knowledge base and technical skills to provide care as an entry level Physical Therapist Assistant.
Recognize and demonstrate professional behaviors and foster diversity, inclusion, understanding, and acceptance, appropriate for practice as an entry level Physical Therapist Assistant.
Demonstrate behaviors that comply with legal standards and adhere to the ethical standards established by the American Physical Therapy Association for Physical Therapist Assistants.
Demonstrate safe, efficient, and compassionate care for patients in a variety of settings as Physical Therapist Assistants.

What Classes do I take?

2-Year Plan
Physical Therapist Assistant - AAS: Recommended Sequence - Current
Total Credits
68 - 70
Description
Enrollment Status: Full Time

If you have questions about the order in which you should take these courses, or the availability of these courses, please contact your advisor or the faculty contact listed below.

Program Contact Information

Office Contact: School of Health and Human Services: 313-845-9877, hhsinfo@hfcc.edu, Health Careers Education Ctr, Room: G-132

Faculty Contact: Stephen Pedley: 313-317-6576, sepedley@hfcc.edu, Health Careers Education Ctr, Room: G-133H

Academic Advisor: Samer Atris: 313-317-6862, satris1@hfcc.edu, Health Careers Bldg, Room: G-203C

For students in an older version of this program, please visit Henry Ford College Catalog Archive to view required courses.

Year	Semester	Semester Credits

Year	Semester	Semester Credits
Year 1	Winter	13

Courses
- AH132 - Introduction to Healthcare Professions

Semester Credits
3
Contact Hours
62

Courses
- BIO233 - Anatomy and Physiology I

Semester Credits
4
Contact Hours
77

Courses
- ENG131 - Introduction to College Writing

Semester Credits
3
Contact Hours
47

Courses
- PSY131 - Introductory Psychology

Semester Credits
3
Contact Hours
47

Year	Semester	Semester Credits
Year 1	Fall	14

Courses
- PTA102 - Introduction Physical Therapy Practice

Semester Credits
2
Contact Hours
32

Courses
- PTA110 - Therapeutic Techniques for PTA I

Semester Credits
2
Contact Hours
47

Courses
- PTA132 - Kinesiology for PTA's

Semester Credits
3
Contact Hours
69.5

Courses
- PTA168 - Developmen Across the Lifespan for PTAs

Semester Credits
3
Contact Hours
47

Courses
- BIO234 - Anatomy and Physiology II

Semester Credits
4
Contact Hours
77

Year	Semester	Semester Credits
Year 2	Winter	17 - 19

Courses
- HCS131 - Computers in Health Care

Semester Credits
3
Contact Hours
47

Courses
- PTA118 - Exercise Techniques I

Semester Credits
2
Contact Hours
32

Courses
- PTA122 - Exercise Techniques Lab

Semester Credits
2
Contact Hours
62

Courses
- PTA144 - Physical Therapy Modalities

Semester Credits
2
Contact Hours
47

Courses
- PTA225 - Applied Pathology for PTAs

Semester Credits 4
Contact Hours 62

Courses
- MATH110 - Intermediate Algebra
  OR
- MATH115 - College Algebra
  OR
- MATH131 - Mathematics for the Modern World
  OR
- MATH141 - Introduction to Statistics
  OR
- MATH165 - Mathematics for Calculus
  OR
- MATH175 - Precalculus
  OR
- MATH180 - Calculus I
  OR
- MATH183 - Calculus II
  OR
- MATH275 - Discrete Mathematics
  OR
- MATH280 - Calculus III
  OR
- MATH288 - Differential Equations

Semester Credits 4 - 6
Contact Hours 62 - 92

Year	Semester	Semester Credits
Year 2	Summer	2

Courses
- PTA291 - Clinical Externship 1

Semester Credits 2
Contact Hours 120

Year	Semester	Semester Credits
Year 2	Fall	13

Courses
- PTA250 - Extremity Orthopedics

Semester Credits 4
Contact Hours 77

Courses
- PTA254 - Spinal Orthopedics

Semester Credits 3
Contact Hours 62

Courses
- PTA262 - Rehabilitation of Neurological Cond 1

Semester Credits 2
Contact Hours 32

Courses
- PTA265 - Rehab of Neurological Conditions Lab

Semester Credits 2
Contact Hours 60

Courses
- PTA272 - Professional Issues in Physical Therapy

Semester Credits 2
Contact Hours 32

Year	Semester	Semester Credits
Year 3	Winter	9

Courses
- PTA295 - Clinical Externship II

Semester Credits 9
Contact Hours 560

2-Year Plan
Physical Therapist Assistant - AAS: Recommended Sequence 2022-2023
Total Credits
73
Description
Enrollment Status: Full Time

If you have questions about the order in which you should take these courses, or the availability of these courses, please contact your advisor or the faculty contact listed below.

Program Contact Information

Office Contact: School of Health and Human Services: 313-845-9877, hhsinfo@hfcc.edu, Health Careers Education Ctr, Room: G-132

Faculty Contact: Stephen Pedley: 313-317-6576, sepedley@hfcc.edu, Health Careers Education Ctr, Room: G-133H

Academic Advisor: Samer Atris: 313-317-6862, satris1@hfcc.edu, Health Careers Bldg, Room: G-203C

For students in an older version of this program, please visit Henry Ford College Catalog Archive to view required courses.

Year	Semester	Semester Credits
Year 1	Winter	18

Courses
- AH100 - Medical Terminology

Semester Credits 4
Contact Hours 62

Courses
- BIO233 - Anatomy and Physiology I

Semester Credits 4
Contact Hours 77

Courses
- ENG131 - Introduction to College Writing

Semester Credits
3
Contact Hours
47

Courses
- POLS131 - Intro to American Gov't & Politi Science

Semester Credits
3
Contact Hours
47

Courses
- PHYS133 - Principles of Physics

Semester Credits
4
Contact Hours
77

Year	Semester	Semester Credits
Year 1	Fall	14

Courses
- PTA102 - Introduction Physical Therapy Practice

Semester Credits
2
Contact Hours
32

Courses
- PTA110 - Therapeutic Techniques for PTA I

Semester Credits
2
Contact Hours
47

Courses
- PTA132 - Kinesiology for PTA's

Semester Credits
3
Contact Hours
69.5

Courses
- PTA168 - Developmen Across the Lifespan for PTAs

Semester Credits
3
Contact Hours
47

Courses
- BIO234 - Anatomy and Physiology II

Semester Credits
4
Contact Hours
77

Year	Semester	Semester Credits
Year 2	Winter	17

Courses
- HCS131 - Computers in Health Care

Semester Credits
3
Contact Hours
47

Courses
- PTA118 - Exercise Techniques I

Semester Credits
2
Contact Hours
32

Courses
- PTA122 - Exercise Techniques Lab

Semester Credits
2
Contact Hours
62

Courses
- PTA144 - Physical Therapy Modalities

Semester Credits
2
Contact Hours
47

Courses
- PTA225 - Applied Pathology for PTAs

Semester Credits
4
Contact Hours
62

Courses
- MATH110 - Intermediate Algebra
  OR
- MATH115 - College Algebra
  OR
- MATH131 - Mathematics for the Modern World
  OR
- MATH141 - Introduction to Statistics
  OR
- MATH165 - Mathematics for Calculus
  OR
- MATH175 - Precalculus
  OR
- MATH180 - Calculus I
  OR
- MATH183 - Calculus II
  OR
- MATH275 - Discrete Mathematics
  OR
- MATH280 - Calculus III
  OR
- MATH288 - Differential Equations

Semester Credits 4
Contact Hours 62

Year	Semester	Semester Credits
Year 2	Fall	13

Courses
- PTA250 - Extremity Orthopedics

Semester Credits 4
Contact Hours 77

Courses
- PTA254 - Spinal Orthopedics

Semester Credits 3
Contact Hours 62

Courses
- PTA262 - Rehabilitation of Neurological Cond 1

Semester Credits 2
Contact Hours 32

Courses
- PTA265 - Rehab of Neurological Conditions Lab

Semester Credits 2
Contact Hours 60

Courses
- PTA291 - Clinical Externship 1

Semester Credits 2
Contact Hours 120

Year	Semester	Semester Credits
Year 3	Winter	11

Courses
- PTA272 - Professional Issues in Physical Therapy

Semester Credits 2
Contact Hours 32

Courses
- PTA295 - Clinical Externship II

Semester Credits 9
Contact Hours 560

Program Requirements

Minimum Credits for Program Completion
68

Minimum GPA required for Graduation
2.000

HFC Credit Hour Residency Requirement
20

Simple Requisites

Core Course Requirements

Physical Therapy Assistant AAS - Core Course Requirements
Type
Completion Requirement

All PTA courses taken at HFC must be successfully completed within three consecutive calendar years.

A minimum of a **B** - grade is required for PTA courses.

Complete ALL of the following Courses:
- PTA102-Intro to PT Practice 2 credits
- PTA110-Therapeutic Techniques PTA I 2 credits
- PTA118-Exercise Techniques I 2 credits
- PTA122-Exercise Techniques Lab 2 credits
- PTA132-Kinesiology for PTA's 3 credits
- PTA144-Physical Therapy Modalities 2 credits
- PTA168-Dev Across Lifespan for PTAs 3 credits
- PTA225-Applied Pathology for PTAs 4 credits
- PTA250-Extremity Orthopedics 4 credits
- PTA254-Spinal Orthopedics 3 credits
- PTA262-Rehab Neurological Cond 1 2 credits
- PTA265-Rehab Neuro Conditions Lab 2 credits
- PTA272-Professional Issues in PT 2 credits
- PTA291-Clinical Extern 1 2 credits
- PTA295-Clinical Externship II 9 credits

Support Course Requirements

Physical Therapy Assistant AAS - Support Course Requirements
Type
Completion Requirement

BIO234 Anatomy and Physiology II must be completed with a minimum grade of **C**

Complete ALL of the following Courses:

- BIO234-Anatomy and Physiology II 4 credits
- ENG131-Introduction College Writing 3 credits
- HCS131-Computers in Health Care 3 credits
- MATH110-Intermediate Algebra 4 credits
  OR MATH115-College Algebra 5 credits
  OR MATH131-Math for the Modern World 4 credits
  OR MATH141-Introduction to Statistics 4 credits
  OR MATH165-Mathematics for Calculus 6 credits
  OR MATH175-Precalculus 5 credits
  OR MATH180-Calculus 1 5 credits
  OR MATH183-Calculus II 5 credits
  OR MATH275-Discrete Mathematics 4 credits
  OR MATH280-Calculus III 5 credits
  OR MATH288-Differential Equations 5 credits

Additional Comments:
See General Education Requirements for Applied Degrees for details.

PUBLICHEALTH.AS - Public Health

Program Information

Program Title
Public Health

Program Code
PUBLICHEALTH.AS

Degree Type
Associate in Science

Minimum Credits for Program Completion
61

Program Eligible for Financial Aid?
Yes

Subject
Public Health

Semesters to Complete Program
4

Program Description
Associate of Science Degree in Public Health is designed to provide students the tools in preparation for a variety of entry-level public health positions in community service, health-related, recreation, and public health facilities. This program is designed to be able to transfer toward a bachelor's degree in health education, health administration, environmental health, or a related field.

Faculty Contact
Kenetra Young

Faculty Contact Email
kcyoung2@hfcc.edu

Faculty Contact Phone
313-317-4123

Faculty Contact Office Location
G-133J

Academic Advisor
Samer Atris

Academic Advisor Contact Email
satris1@hfcc.edu

Academic Advisor Contact Phone
313-317-6862

Academic Advisor Office Location
G-203C

School
Health & Human Services

Academic Department
Health Careers, Education, and Human Services

Admissions Requirements

Admissions Requirements
There are no specific admission requirements for acceptance into the Public Health program. When you apply to the college, choose Public Health as your course of study.

Program Learning Outcomes

Promote health, wellness and resources for the effective functioning of an individual, family, group and community.

Demonstrate knowledge of the many facets of individual and community health including risk factors, substance use, equity, attitudes, and behaviors and their impact on the variety of delivery systems.

Use appropriate data and statistics to make decisions regarding strategies improving public health services.

What Classes do I take?

2-Year Plan
Public Health - AS: Recommended Sequence - Current
Total Credits
61
Description
Enrollment Status: Full Time

If you have questions about the order in which you should take these courses, or the availability of these courses, please contact your advisor or the faculty contact listed below.

Program Contact Information

Office Contact: School of Health and Human Services: 313-845-9877, hhsinfo@hfcc.edu, Health Careers Education Ctr, Room: G-132

Faculty Contact: Kenetra Young: 313-317-4123, kcyoung2@hfcc.edu, Health Careers Education Ctr, Room: G-133J

Academic Advisor: Samer Atris: 313-317-6862, satris1@hfcc.edu, Health Careers Bldg, Room: G-203C

For students in an older version of this program, please visit Henry Ford College Catalog Archive to view required courses.

Year	Semester	Semester Credits
Year 1	Fall	17

Courses
- AH100 - Medical Terminology

Semester Credits 4
Contact Hours 62

Courses
- AH141 - Introduction to Public Health

Semester Credits 3
Contact Hours 47

Courses
- BIO131 - Introduction to Biology

Semester Credits 4
Contact Hours 92

Courses
- PSY131 - Introductory Psychology

Semester Credits 3
Contact Hours 47

Courses
- CIS100 - Introduction to Information Technology
  OR
- HCS131 - Computers in Health Care

Semester Credits 3
Contact Hours 47

Year	Semester	Semester Credits
Year 1	Winter	16

Courses
- AH151 - Introduction to Community Health

Semester Credits
3
Contact Hours
47

Courses
- HPE141 - Introduction to Health and Wellness

Semester Credits
3
Contact Hours
47

Courses
- MATH141 - Introduction to Statistics

Semester Credits
4
Contact Hours
62

Courses
- SOC131 - Introduction to Sociology

Semester Credits
3
Contact Hours
47

Courses
- ENG131 - Introduction to College Writing
  OR
- ENG131H - Honors Introduction to College Writing

Semester Credits
3
Contact Hours
47

Year	Semester	Semester Credits
Year 2	Fall	15

Courses
- BIO138 - Environmental Science Lecture

Semester Credits
3
Contact Hours
47

Courses
- BIO139 - Environmental Science Laboratory

Semester Credits
2
Contact Hours
45

Courses
- ENG132 - College Writing and Research
  OR
- ENG132H - Honors College Writing and Research
  OR
- ENG135 - Business & Technical Writing & Research
  OR
- SPC131 - Intro to Public Speaking

Semester Credits
3
Contact Hours
47

Courses
- CAT5 - Gen Ed Transfer - 2025

Semester Credits
3
Contact Hours
47

Courses
- Math and Science Electives: Complete four (4) additional credits of 100-level or higher Math and/or Science courses from the General Education Requirements list. (Generic)

Semester Credits
4
Contact Hours
62

Year	Semester	Semester Credits
Year 2	Winter	13

Courses
- HPE158 - Introduction to Nutrition

Semester Credits
3
Contact Hours
47

Courses
- Math and Science Electives: Complete four (4) additional credits of 100-level or higher Math and/or Science courses from the General Education Requirements list. (Generic)

Semester Credits
4
Contact Hours
62

Courses
- CAT5 - Gen Ed Transfer - 2025

Semester Credits 3
Contact Hours 47

Courses
- Natural Sciences: Complete any one, not BIO. (CHEM-131 or CHEM-141 are recommended) See General Education Requirements for details. (Generic)
  OR
- CHEM131 - Principles of Chemistry
  OR
- CHEM141 - Principles Gen & Inorganic Chemistry I

Semester Credits 3
Contact Hours 47

Program Requirements

Minimum Credits for Program Completion
61
Minimum GPA required for Graduation
2.000
HFC Credit Hour Residency Requirement
20

Simple Requisites

Core Course Requirements

Public Health AS - Core Course Requirements
Type
Completion Requirement

Complete ALL of the following Courses:
- PSY131-Introductory Psychology 3 credits
- SOC131-Introduction to Sociology 3 credits
- AH141-Introduction to Public Health 3 credits
- AH151-Intro to Community Health 3 credits
- HPE141-Intro to Health and Wellness 3 credits
- HPE158-Introduction to Nutrition 3 credits
- AH100-Medical Terminology 4 credits
- BIO138-Environmental Science Lecture 3 credits
- BIO139-Environmental Science Lab 2 credits

Support Course Requirements

Public Health AS - Support Course Requirements
Type
Completion Requirement

Computer Technology

Complete at least 1 of the following courses:
- CIS100-Intro Info Tech 3 credits
  OR HCS131-Computers in Health Care 3 credits

Category 3: Mathematics

Complete ALL of the following Courses:
- MATH141-Introduction to Statistics 4 credits

Category 6: Natural Sciences

If BIO-131 has been waived, take an additional four (4) credit science course with lab to fulfill this requirement.

Complete at least 1 of the following courses:
- BIO131-Introduction to Biology 4 credits

Category 1: English Composition

Complete at least 1 of the following courses:
- ENG131-Introduction College Writing 3 credits
  OR ENG131H-Honors Intro College Writing 3 credits

Category 2: English Composition or Communications

Complete at least 1 of the following courses:
- ENG132-College Writing and Research 3 credits
  OR ENG132H-Honors Coll Writing & Research 3 credits
  OR ENG135-Bus & Tech Writing & Research 3 credits
  OR SPC131-Introduction Public Speaking 3 credits

Math and Science Electives

Complete eight (8) additional credits of 100-level or higher Math and/or Science courses

Earn at least 8 credits

General Education Requirements

Public Health AS - General Education Requirements
Type
Completion Requirement

Category 5: Humanities and Fine Arts

Complete any two, from different disciplines, from the General Education Requirements for Transfer Degrees (MTA) list.

Complete at least 2 courses in the following course sets:
- CAT5 - Gen Ed Transfer - 2025

Category 6: Natural Sciences

Complete any one, not BIO (recommend CHEM131 Principles of Chemistry or CHEM141 Prin Gen & Inorgan Chem I), from the General Education Requirements for Transfer Degrees (MTA) list.

Complete at least 1 courses in the following course sets:
- CAT6 - Transfer - Lec and Lab - 2025
- CAT6 - Transfer - Lec Only - 2020
- CAT6 - Gen Ed Transfer - Lab Only - 2020

Additional Comments:
See General Education Requirements for Transfer Degrees for details.

RADTC.AAS - Radiographer

Program Information

Program Title
Radiographer AAS Degree

Program Code
RADTC.AAS

Degree Type
Associate in Applied Science

Minimum Credits for Program Completion
73

Program Eligible for Financial Aid?
Yes

Subject
Radiographer Technologist

Semesters to Complete Program
5

Program Description
Prepares students for a career in Radiologic Technology, a segment of medicine devoted to patient diagnosis through the use of ionizing radiation. Specifically, radiation is used to create images of tissues, organs, bones and vessels that comprise the human body. Clinical assignments will be held at a variety of health care settings throughout southeastern Michigan.

Program Accreditation Information
The HFC Radiographer Program is accredited by the Joint Review Committee on Education in Radiologic Technology (JRCERT).

20 N. Wacker Drive, Suite 2850
Chicago, IL 60606-3182
(312) 704-5300

email: mail@jcert.org

The program's current accreditation award is 8 years. General program accreditation information and the current accreditation award letter can be found here:

https://www.jrcert.org/programs/henry-ford-college/

JRCERT Program Effectiveness Data

Graduation Rate
a. Class of 2023: 90% (18/20)

ARRT National Credentialing Exam Pass Rate (1st attempt)
a. Class of 2023: 78% (14/18)
b. 5-year average (2018-2022): 81% (83/103)

Job Placement Rate
a. Class of 2023: 89% (16/18)
b. 5-year average (2019-2023): 96% (92/96)

View the complete Program Effectiveness Data report.

Faculty Contact	Faculty Contact Email	Faculty Contact Phone	Faculty Contact Office Location
Carolyn Attard	clbarta@hfcc.edu	313-845-9813	G-133A

Academic Advisor	Academic Advisor Contact Email	Academic Advisor Contact Phone	Academic Advisor Office Location
Samer Atris	satris1@hfcc.edu	313-317-6862	G-203C

School
Health & Human Services

Academic Department
Health Careers, Education, and Human Services

Admissions Requirements

Admissions Requirements
Admission Requirements and Eligibility

Students who meet all admission requirements are considered qualified and are admitted to the program once per year in the fall semester on a "first-qualified, first-admitted" basis. Acceptance into the college does not constitute nor guarantee admission to the program. Final approval to enroll in the program comes from the Radiographer AAS Degree Director.

Program Admission Requirements

1. College GPA of at least 2.50 or higher for the last 12 academic credits, excluding lower than 100-level courses, HPE activity, studio and performance classes (if applicable)
2. ACCUPLACER Next Gen (255+) Reading Score.
3. Eligible for placement into ENG131 Introduction College Writing
4. MATH100 Basic Tech Mathematics or higher with a C grade or better.
5. BIO233 Anatomy and Physiology I, with a C grade or better.
6. AH100 Medical Terminology with a C grade or better.

The Program Admission Process

Our Health Career programs are limited enrollment programs with specific admission requirements. In order to get on the qualified list, you must complete the Health Careers Radiographer (RAD) application found at the Health Careers Admissions Process site and all the RAD admission requirements. It is recommended that students interested in a health career meet with the Health Careers Student Success Navigator located in the Welcome Center Advising area. Make an appointment with the Health Careers Student Success Navigator early in your planning process. This will allow you to discuss program options and create an academic plan to qualify for the selected program.

Due to the number of credit hours required for program completion and the intensity of the program, students are encouraged to complete as many of the Required Support Courses as possible prior to entering the program. The first courses that a student should complete are those required for program admission followed by the other Required Support Courses.

Courses Required for Program Admission
MATH100 - Basic Technical Mathematics, BIO233 - Anatomy and Physiology I, AH100 - Medical Terminology

Program Learning Outcomes

Demonstrate clinical competence.
Communicate effectively.
Demonstrate critical thinking by adapting radiographic procedures to a variety of patients.
Demonstrate the personal and professional behaviors of an entry-level radiologic technologist.

What Classes do I take?

2-Year Plan
Radiographer - AAS: Recommended Sequence - Current
Total Credits
61
Description
Enrollment Status: Full Time

If you have questions about the order in which you should take these courses, or the availability of these courses, please contact your advisor or the faculty contact listed below.

Program Contact Information

Office Contact: School of Health and Human Services: 313-845-9877, hhsinfo@hfcc.edu, Health Careers Education Ctr, Room: G-132

Faculty Contact: Carolyn Attard: 313-845-9813, clbarta@hfcc.edu, Health Careers Education Ctr, Room: G-133A

Academic Advisor: Samer Atris: 313-317-6862, satris1@hfcc.edu, Health Careers Bldg, Room: G-203C

For students in an older version of this program, please visit Henry Ford College Catalog Archive to view required courses.

Year	Semester	Semester Credits
Year 1	Fall	11

Courses
- RAD109 - Clinical Education I

Semester Credits 3
Contact Hours 800 - 192

Courses
- RAD111 - Principles of Radiation Protection

Semester Credits 2
Contact Hours 32

Courses
- RAD114 - Introduction to Radiology & Patient Care

Semester Credits 3
Contact Hours 47

Courses
- RAD118 - Radiographic Positioning

Semester Credits 3
Contact Hours 62

Year	Semester	Semester Credits
Year 1	Winter	15

Courses
- BIO234 - Anatomy and Physiology II

Semester Credits 4
Contact Hours 77

Courses
- RAD158 - Radiographic Positioning II

Semester Credits 3
Contact Hours 62

Courses
- RAD161 - Imaging Equipment

Semester Credits 1
Contact Hours 16

Courses
- RAD171 - Principles of Exposure

Semester Credits 3
Contact Hours 47

Courses
- RAD181 - Fluoroscopy Studies

Semester Credits 1
Contact Hours 16

Courses
- RAD190 - Clinical Education II

Semester Credits 3
Contact Hours 800 - 360

Year	Semester	Semester Credits
Year 1	Summer	8

Courses
- RAD196 - Clinical Education Level 3

Semester Credits 4
Contact Hours 600 - 288

Courses
- RAD284 - Principles of Computed Tomography

Semester Credits 1
Contact Hours 16

Courses
- HCS131 - Computers in Health Care

Semester Credits 3
Contact Hours 47

Year	Semester	Semester Credits
Year 2	Fall	12

Courses
- RAD209 - Intermediate Clinical Education

Semester Credits 3
Contact Hours 800 - 360

Courses
- RAD214 - Pathology and Cross Sectional Anatomy

Semester Credits 2
Contact Hours 32

Courses
- RAD228 - Radiographic Procedures

Semester Credits
3
Contact Hours
62

Courses
- RAD267 - Radiation Physics

Semester Credits
4
Contact Hours
62

Year	Semester	Semester Credits
Year 2	Winter	15

Courses
- RAD271 - Digital Image Acquisition and Management

Semester Credits
2
Contact Hours
32

Courses
- RAD274 - Principles of Radiation Biology

Semester Credits
2
Contact Hours
32

Courses
- RAD286 - Registry Review

Semester Credits
2
Contact Hours
32

Courses
- RAD290 - Advanced Clinical Education

Semester Credits
3
Contact Hours
800 - 240

Courses
- ENG131 - Introduction to College Writing

Semester Credits
3
Contact Hours
47

Courses
- Social Science: Complete one Political Science (POLS), Psychology (PSY), or Sociology (SOC) course. (Generic)

Semester Credits
3
Contact Hours
47

2-Year Plan
Radiographer - AAS: Recommended Sequence 2022-2023
Total Credits
62
Description
Enrollment Status: Full Time

If you have questions about the order in which you should take these courses, or the availability of these courses, please contact your advisor or the faculty contact listed below.

Program Contact Information

Office Contact: School of Health and Human Services: 313-845-9877, hhsinfo@hfcc.edu, Health Careers Education Ctr, Room: G-132

Faculty Contact: Carolyn Attard: 313-845-9813, clbarta@hfcc.edu, Health Careers Education Ctr, Room: G-133A

Academic Advisor: Samer Atris: 313-317-6862, satris1@hfcc.edu, Health Careers Bldg, Room: G-203C

For students in an older version of this program, please visit Henry Ford College Catalog Archive to view required courses.

Year	Semester	Semester Credits
Year 1	Fall	12

Courses
- RAD 101 (Inactive) (Generic)

Semester Credits
1
Contact Hours
16

Courses
- RAD109 - Clinical Education I

Semester Credits
3
Contact Hours
800 - 192

Courses
- RAD111 - Principles of Radiation Protection

Semester Credits
2
Contact Hours
32

Courses
- RAD114 - Introduction to Radiology & Patient Care

Semester Credits 3
Contact Hours 47

Courses
- RAD118 - Radiographic Positioning

Semester Credits 3
Contact Hours 62

Year	Semester	Semester Credits
Year 1	Winter	15

Courses
- BIO234 - Anatomy and Physiology II

Semester Credits 4
Contact Hours 77

Courses
- RAD158 - Radiographic Positioning II

Semester Credits 3
Contact Hours 62

Courses
- RAD161 - Imaging Equipment

Semester Credits 1
Contact Hours 16

Courses
- RAD171 - Principles of Exposure

Semester Credits 3
Contact Hours 47

Courses
- RAD181 - Fluoroscopy Studies

Semester Credits 1
Contact Hours 16

Courses
- RAD190 - Clinical Education II

Semester Credits 3
Contact Hours 800 - 360

Year	Semester	Semester Credits
Year 1	Summer	8

Courses
- RAD196 - Clinical Education Level 3

Semester Credits 4
Contact Hours 600 - 288

Courses
- RAD284 - Principles of Computed Tomography

Semester Credits 1
Contact Hours 16

Courses
- HCS131 - Computers in Health Care

Semester Credits 3
Contact Hours 47

Year	Semester	Semester Credits
Year 2	Fall	12

Courses
- RAD209 - Intermediate Clinical Education

Semester Credits 3
Contact Hours 800 - 360

Courses
- RAD214 - Pathology and Cross Sectional Anatomy

Semester Credits 2
Contact Hours 32

Courses
- RAD228 - Radiographic Procedures

Semester Credits 3
Contact Hours 62

Courses
- RAD267 - Radiation Physics

Semester Credits 4
Contact Hours 62

Year	Semester	Semester Credits
Year 2	Winter	15

Courses
- RAD271 - Digital Image Acquisition and Management

Semester Credits 2
Contact Hours 32

Courses
- RAD274 - Principles of Radiation Biology

Semester Credits 2
Contact Hours 32

Courses
- RAD286 - Registry Review

Semester Credits
2
Contact Hours
32

Courses
- RAD290 - Advanced Clinical Education

Semester Credits
3
Contact Hours
800 - 240

Courses
- ENG131 - Introduction to College Writing

Semester Credits
3
Contact Hours
47

Courses
- Social Science: Complete one Political Science (POLS), Psychology (PSY), or Sociology (SOC) course. (Generic)

Semester Credits
3
Contact Hours
47

Program Requirements

Minimum Credits for Program Completion
73

Minimum GPA required for Graduation
2.000

HFC Credit Hour Residency Requirement
20

Simple Requisites

Core Course Requirements

Radiographer AAS - Core Course Requirements
Type
Completion Requirement

Complete ALL of the following Courses:
- RAD109-Clinical Education I 3 credits
- RAD111-Prin Radiation Protecton 2 credits
- RAD114-Basic Patient Care Radiography 3 credits
- RAD118-Radiographic Positioning 3 credits
- RAD158-Radiographic Positioning II 3 credits
- RAD161-Imaging Equipment 1 credits
- RAD171-Principles of Exposure 3 credits
- RAD181-Fluoroscopy Studies 1 credits
- RAD190-Clinical Education II 3 credits
- RAD196-Clinical Education Level 3 4 credits
- RAD209-Intermediate Clinical Educatio 3 credits
- RAD214-Pathology & Cross Sect Anatomy 2 credits
- RAD228-Radiographic Procedures 3 credits
- RAD267-Radiation Physics 4 credits
- RAD271-Digital Image Acquisition Mgt. 2 credits
- RAD274-Principles Radiation Biology 2 credits
- RAD284-Principles Computed Tomography 1 credits
- RAD286-Registry Review 2 credits
- RAD290-Advanced Clinical Education 3 credits

Support Course Requirements

Radiographer AAS - Support Course Requirements
Type
Completion Requirement

Complete ALL of the following Courses:
- BIO234-Anatomy and Physiology II 4 credits
- ENG131-Introduction College Writing 3 credits
- HCS131-Computers in Health Care 3 credits

Social Science: Complete one Political Science (POLS), Psychology (PSY), or Sociology (SOC) course.

Additional Comments:
See General Education Requirements for Applied Degrees for details.

RECORDINGARTS.CA - Recording Arts

Program Information

Program Title
Recording Arts Certificate

Program Code
RECORDINGARTS.CA

Degree Type
Certificate of Achievement

Minimum Credits for Program Completion
30

Program Eligible for Financial Aid?
Yes

Subject
Music

Semesters to Complete Program
2

Program Description
Provides course work in essential music skills and digital recording techniques. Covers recording engineering, mixing, and mastering of recorded works. Uses a live studio environment to promote the development of practical skills.

Faculty Contact
Anthony Lai

Faculty Contact Email
ajlai@hfcc.edu

Faculty Contact Phone
313-845-6474

Academic Advisor
Sarah Krizan

Academic Advisor Contact Email
smkrizan@hfcc.edu

Academic Advisor Contact Phone
313-845-9889

Academic Advisor Office Location
K-248

School
Liberal Arts

Academic Department
Fine & Performing Arts

Admissions Requirements

Admissions Requirements
Admission Requirements and Eligibility

1. Basic computer skills
2. Fundamental knowledge of music theory

Program Learning Outcomes

Select, set up, and place recording equipment for a variety of musical ensembles.

Set up, manage, and use Pro Tools digital recording software including plug-ins.

Communicate with musicians/clients using industry and musical terminology.

Interpret artistic ideas and translate them into high quality recordings.

Prepare and master recordings for different release media and in multiple formats.

Become proficient in the use of Avid Pro Tools software.

Optional: Take and pass Pro Tools Certification Exams.

What Classes do I take?

2-Year Plan
Recording Arts - CA: Recommended Sequence - Current
Total Credits
31
Description
Enrollment Status: Full Time

If you have questions about the order in which you should take these courses, or the availability of these courses, please contact your advisor or the faculty contact listed below.

Program Contact Information

Office Contact: School of Liberal Arts; 313-845-9624, lainfo@hfcc.edu, Liberal Arts Building, Room: K-201 and F-138

Faculty Contact: Anthony Lai: 313-845-6474, ajlai@hfcc.edu

Academic Advisor: Sarah Krizan: 313-845-9889, smkrizan@hfcc.edu, Liberal Arts Bldg, Room: K-248

For students in an older version of this program, please visit Henry Ford College Catalog Archive to view required courses.

Year	Semester	Semester Credits
Year 1	Fall	17

Courses
- MUS117 - Piano Class 1

Semester Credits 2
Contact Hours 32

Courses
- MUS134 - Music Fundamentals

Semester Credits 3
Contact Hours 47

Courses
- MUS138 - Music Theory 1

Semester Credits 3
Contact Hours 47

Courses
- MUS141 - Aural Music Skills 1

Semester Credits
2
Contact Hours
32

Courses
- MUS191 - Audio Recording Technology 1

Semester Credits
4
Contact Hours
62

Courses
- MUS192 - Pro Tools 101

Semester Credits
2
Contact Hours
32

Courses
- MUS107 - Chorus 1
  OR
- MUS108 - Chorus 2
  OR
- MUS109 - Symphony Band 1
  OR
- MUS110 - Symphony Band 2
  OR
- MUS111 - Jazz Band 1
  OR
- MUS112 - Jazz Band 2
  OR
- MUS113 - Applied Music (1 Credit) 1
  OR
- MUS114 - Applied Music (2 Credits)1
  OR
- MUS115 - Applied Music (1 Credit) 2
  OR
- MUS143 - Vocal Jazz Ensemble 1
  OR
- MUS144 - Vocal Jazz Ensemble 2
  OR
- MUS157 - Applied Music (live Sound Rein & Record)

Semester Credits
1
Contact Hours
47

Year	Semester	Semester Credits
Year 1	Winter	14

Courses
- MUS139 - Music Theory 2

Semester Credits
3
Contact Hours
47

Courses
- MUS142 - Aural Music Skills 2

Semester Credits
2
Contact Hours
32

Courses
- MUS291 - Audio Recording Technology 2

Semester Credits
4
Contact Hours
62

Courses
- MUS292 - Pro Tools 110

Semester Credits
2
Contact Hours
32

Courses
- MUS299 - Recording Arts Capstone

Semester Credits
2
Contact Hours
32

Courses
- MUS107 - Chorus 1
  OR
- MUS108 - Chorus 2
  OR
- MUS109 - Symphony Band 1
  OR
- MUS110 - Symphony Band 2
  OR
- MUS111 - Jazz Band 1
  OR
- MUS112 - Jazz Band 2
  OR
- MUS113 - Applied Music (1 Credit) 1
  OR
- MUS114 - Applied Music (2 Credits)1
  OR
- MUS115 - Applied Music (1 Credit) 2
  OR
- MUS143 - Vocal Jazz Ensemble 1
  OR
- MUS144 - Vocal Jazz Ensemble 2
  OR
- MUS157 - Applied Music (live Sound Rein & Record)

Semester Credits	1
Contact Hours	47

Program Requirements

Minimum Credits for Program Completion	Minimum GPA required for Graduation	HFC Credit Hour Residency Requirement
30	2.000	20

Simple Requisites

Core Course Requirements

Recording Arts CA - Core Course Requirements
Type
Completion Requirement

Complete ALL of the following Courses:
- MUS117-Piano Class 1 2 credits
- MUS134-Music Fundamentals 3 credits
- MUS138-Music Theory 1 3 credits
- MUS141-Aural Music Skills 1 2 credits
- MUS191-Audio Recording Technology 1 4 credits
- MUS192-Pro Tools 101 2 credits
- MUS291-Audio Recording Technology 2 4 credits
- MUS292-Pro Tools 110 2 credits
- MUS299-Recording Arts Capstone 2 credits

Music

Earn at least 2 credits from the following:
- MUS107-Chorus 1 1 credits
  OR MUS108-Chorus 2 1 credits
  OR MUS109-Symphony Band 1 1 credits
  OR MUS110-Symphony Band 2 1 credits
  OR MUS111-Jazz Band 1 1 credits
  OR MUS112-Jazz Band 2 1 credits
  OR MUS113-Applied Music (1 Credit) 1 1 credits
  OR MUS114-Applied Music (2 Credits)1 2 credits
  OR MUS115-Applied Music (1 Credit) 2 1 credits
  OR MUS143-Vocal Jazz Ensemble 1 1 credits
  OR MUS144-Vocal Jazz Ensemble 2 1 credits
  OR MUS157-Applied Music (LSR&R) 1 credits

Complete an additional 4 credit hours worth of electives to reach the 30-credit hour program requirement.

Earn at least 4 credits

RESTH.AAS - Respiratory Therapist

Program Information

Program Title
Respiratory Therapist AAS Degree

Program Code
RESTH.AAS

Degree Type
Associate in Applied Science

Minimum Credits for Program Completion
73.5

Program Eligible for Financial Aid?
Yes

Subject
Respiratory Therapy

Semesters to Complete Program
6

Program Description
Prepares individuals for employment as entry-level Respiratory Therapists. Graduates of the program are awarded an Associate in Applied Science Degree and are eligible to apply for the National Board of Respiratory Care (NBRC) examination(s) leading to the national credential designation of Registered Respiratory Therapist (RRT) and state licensure as a Respiratory Therapist. The program provides a blend of classroom, laboratory, and clinical experiences. The first year of the program involves completion of technical and support courses. Beginning with the spring semester and throughout the second year of the program, students are required to complete advanced technical courses and a wide variety of clinical rotations. Core courses are offered during the day and only in the semester as indicated in the course sequence. Support courses are usually offered in a variety of semesters and times.

Program Accreditation Information
The Henry Ford College Respiratory Therapist program, #200283, Associate in Applied Science degree, in Dearborn, MI is accredited by the Commission on Accreditation for Respiratory Care http://www.coarc.com/ Student/Graduate outcomes for respiratory therapist programs can be found on the CoARC website at: https://coarc.com/students/programmatic-outcomes-data/

HFC Respiratory Therapist Program #200283
CoARC accredits respiratory therapy education programs in the United States. To achieve this end, it utilizes an 'outcomes based' process. Programmatic outcomes are performance indicators that reflect the extent to which the educational goals of the program are achieved and by which program effectiveness is documented.

Commission on Accreditation for Respiratory Care (CoARC) 817-283-2835, www.coarc.com

Faculty Contact
Kim Najarian

Faculty Contact Email
knajarian@hfcc.edu

Faculty Contact Phone
313-317-6812

Faculty Contact Office Location
G-133F

Academic Advisor
Samer Atris

Academic Advisor Contact Email
satris1@hfcc.edu

Academic Advisor Contact Phone
313-317-6862

Academic Advisor Office Location
G-203C

School
Health & Human Services

Academic Department
Health Careers, Education, and Human Services

Admissions Requirements

Admissions Requirements
Admission Requirements and Eligibility

Students who meet all admission requirements are considered qualified and are admitted once a year in the fall semester on a "first-qualified, first admitted" basis. Acceptance into the college does not constitute nor guarantee admission to the program. Final approval to enroll in the program comes from the Respiratory Therapist AAS Degree Program Director.

Program Admission Requirements

1. College GPA of at least 2.70 or higher for a minimum of 12 academic credits, excluding lower than 100 level courses.
2. Accuplacer Next Gen (250+) Reading Score.
3. Completion of MATH110 Intermediate Algebra or higher with a C or better, or Accuplacer Next Gen QAS (255+), or ARITHANG(225+).
4. Completion of AH132 Intro to Healthcare Profession, with a C grade or better.
5. Completion of BIO233 Anatomy and Physiology I, with a C grade or better.
6. Completion of CHEM111 Chem Skills Pre-Professional or CHEM131 Principles of Chemistry or CHEM141 Prin Gen & Inorgan Chem I with a C grade or better.

Program Admission Process

Our Health Career programs are limited enrollment programs with specific admission requirements. In order to get on the qualified list, you must complete the Health Careers Respiratory Therapist (RTH) application found at the Health Careers Admissions Process site and all the RTH admission requirements. It is recommended that students interested in a health career meet with the Health Careers Academic Advisor located in Building G, 2nd floor, G-203. Make an appointment with the Health Careers Academic Advisor early in your planning process. This will allow you to discuss program options and create an academic plan to qualify for the selected program.

Due to the number of credit hours required for program completion and the intensity of the program, students are encouraged to complete as many of the Required Support Courses as possible prior to entering the program. The first courses that a student should complete are those required for program admission followed by the other Required Support Courses.

Courses Required for Program Admission
AH132 - Introduction to Healthcare Professions, BIO233 - Anatomy and Physiology I, CHEM111 - Chem Skills Pre-Professional Programs, CHEM131 - Principles of Chemistry, CHEM141 - Principles Gen & Inorganic Chemistry I

Program Learning Outcomes

- Evaluate a patient's current condition and response to therapy using physical exam, laboratory data, and other clinical information.
- Develop a treatment plan specific to the needs of the patient.
- Recommend additional procedures and therapy to treat the patient, and modifications to treatment plan.
- Administer oxygen therapy according to standard protocol.
- Administer aerosolized medication therapy according to standard protocol.
- Administer bronchial hygiene and lung volume expansion therapy according to standard protocol.
- Recommend initiation, modifications, and liberation from life support.
- Administer mechanical ventilation and life support according to standard protocol.
- Educate patients and family members concerning disease processes and self-care, and the public on preventative medicine.

What Classes do I take?

2-Year Plan
Respiratory Therapist - AAS: Recommended Sequence - Current
Total Credits
73.5
Description
Enrollment Status: Full Time

If you have questions about the order in which you should take these courses, or the availability of these courses, please contact your advisor or the faculty contact listed below.

Program Contact Information

Office Contact: School of Health and Human Services: 313-845-9877, hhsinfo@hfcc.edu, Health Careers Education Ctr, Room: G-132

Faculty Contact: Kim Najarian: 313-317-6812, knajarian@hfcc.edu, Health Careers Education Ctr, Room: G-133F

Academic Advisor: Samer Atris: 313-317-6862, satris1@hfcc.edu, Health Careers Bldg, Room: G-203C

For students in an older version of this program, please visit Henry Ford College Catalog Archive to view required courses.

Year	Semester	Semester Credits
Year 1	Winter	14

Courses
- AH132 - Introduction to Healthcare Professions

Semester Credits 3
Contact Hours 62

Courses
- BIO233 - Anatomy and Physiology I

Semester Credits 4
Contact Hours 77

Courses
- CHEM111 - Chem Skills Pre-Professional Programs
  OR
- CHEM131 - Principles of Chemistry
  OR
- CHEM141 - Principles Gen & Inorganic Chemistry I

Semester Credits 4
Contact Hours 62

Courses
- ENG131 - Introduction to College Writing

Semester Credits 3
Contact Hours 47

Year	Semester	Semester Credits
Year 1	Fall	14

Courses
- BIO234 - Anatomy and Physiology II

Semester Credits 4
Contact Hours 77

Courses
- RTH100 - Principles of Respiratory Care

Semester Credits 3
Contact Hours 47

Courses
- RTH130 - Therapeutic Procedures

Semester Credits 4
Contact Hours 84.5

Courses
- Social Science: Complete one Political Science (POLS), Psychology (PSY), or Sociology (SOC) course. (Generic)

Semester Credits 3
Contact Hours 47

Year	Semester	Semester Credits
Year 2	Winter	13.5

Courses
- RTH160 - Respiratory Therapy Pharmacology

Semester Credits 2
Contact Hours 32

Courses
- RTH170 - Therapeutic Procedures II

Semester Credits 4
Contact Hours 77

Courses
- RTH180 - RT Clinical Sciences

Semester Credits 3
Contact Hours 47

Courses
- RTH195 - Introduction to Clinical Therapeutics

Semester Credits 1.5
Contact Hours 268 - 58

Courses
- HCS131 - Computers in Health Care

Semester Credits
3
Contact Hours
47

Year	Semester	Semester Credits
Year 2	Summer	6

Courses
- RTH210 - Ventilator Management 1

Semester Credits
4
Contact Hours
84.5

Courses
- RTH288 - Intermediate Clinical Therapies

Semester Credits
2
Contact Hours
104

Year	Semester	Semester Credits
Year 2	Fall	14

Courses
- RTH220 - Respiratory Care Neonates & Pediatrics

Semester Credits
1.5
Contact Hours
24

Courses
- RTH240 - Cardiopulmonary Diagnostics

Semester Credits
1.5
Contact Hours
24

Courses
- RTH250 - Advanced Mechanical Ventilation

Semester Credits
4
Contact Hours
84.5

Courses
- RTH295 - Clinical Therapeutics Practicum

Semester Credits
7
Contact Hours
107 - 315

Year	Semester	Semester Credits
Year 3	Winter	12

Courses
- RTH270 - Therapeutic Clinical Management

Semester Credits
2
Contact Hours
32

Courses
- RTH285 - Advanced Respiratory Concepts

Semester Credits
3
Contact Hours
47

Courses
- RTH298 - Advanced Clinical Therapeutics Practicum

Semester Credits
7
Contact Hours
107 - 315

2-Year Plan
Respiratory Therapist - AAS: Recommended Sequence 2022-23
Total Credits
70.5
Description
Enrollment Status: Full Time

If you have questions about the order in which you should take these courses, or the availability of these courses, please contact your advisor or the faculty contact listed below.

Program Contact Information

Office Contact: School of Health and Human Services: 313-845-9877, hhsinfo@hfcc.edu, Health Careers Education Ctr, Room: G-132

Faculty Contact: Kim Najarian: 313-317-6812, knajarian@hfcc.edu, Health Careers Education Ctr, Room: G-133F

Academic Advisor: Samer Atris: 313-317-6862, satris1@hfcc.edu, Health Careers Bldg, Room: G-203C

For students in an older version of this program, please visit Henry Ford College Catalog Archive to view required courses.

Year	Semester	Semester Credits
Year 1	Winter	12

Courses
- AH100 - Medical Terminology

Semester Credits 4
Contact Hours 62

Courses
- BIO233 - Anatomy and Physiology I

Semester Credits 4
Contact Hours 77

Courses
- CHEM131 - Principles of Chemistry
  OR
- CHEM141 - Principles Gen & Inorganic Chemistry I

Semester Credits 4
Contact Hours 62

Year	Semester	Semester Credits
Year 1	Fall	12

Courses
- ENG131 - Introduction to College Writing

Semester Credits 3
Contact Hours 47

Courses
- HCS131 - Computers in Health Care

Semester Credits 3
Contact Hours 47

Courses
- RTH100 - Principles of Respiratory Care

Semester Credits 3
Contact Hours 47

Courses
- RTH130 - Therapeutic Procedures

Semester Credits 3
Contact Hours 47

Year	Semester	Semester Credits
Year 2	Winter	14.5

Courses
- BIO234 - Anatomy and Physiology II

Semester Credits 4
Contact Hours 77

Courses
- RTH160 - Respiratory Therapy Pharmacology

Semester Credits 2
Contact Hours 32

Courses
- RTH170 - Therapeutic Procedures II

Semester Credits 4
Contact Hours 77

Courses
- RTH180 - RT Clinical Sciences

Semester Credits 3
Contact Hours 47

Courses
- RTH195 - Introduction to Clinical Therapeutics

Semester Credits 1.5
Contact Hours 268 - 58

Year	Semester	Semester Credits
Year 2	Summer	7

Courses
- RTH210 - Ventilator Management 1

Semester Credits 4
Contact Hours 84.5

Courses
- RTH289 - Clinical Therapies II (Inactive)

Semester Credits 3
Contact Hours 144

Year	Semester	Semester Credits
Year 2	Fall	12

Courses
- RTH220 - Respiratory Care Neonates & Pediatrics

Semester Credits 1.5
Contact Hours 24

Courses
- RTH240 - Cardiopulmonary Diagnostics

Semester Credits 1.5
Contact Hours 24

Courses
- RTH250 - Advanced Mechanical Ventilation

Semester Credits 4
Contact Hours 84.5

Courses
- RTH 292 (inactive) (Generic)

Semester Credits
5
Contact Hours
240

Year	Semester	Semester Credits
Year 3	Winter	13

Courses
- RTH270 - Therapeutic Clinical Management

Semester Credits
2
Contact Hours
32

Courses
- RTH285 - Advanced Respiratory Concepts

Semester Credits
3
Contact Hours
47

Courses
- RTH294 (inactive) (Generic)

Semester Credits
8
Contact Hours
360

Program Requirements

Minimum Credits for Program Completion
73.5

Minimum GPA required for Graduation
2.000

HFC Credit Hour Residency Requirement
20

Simple Requisites

Core Course Requirements

Respiratory Therapist AAS - Core Course Requirements
Type
Completion Requirement

All program courses, required core and required support course must be successfully completed with a "C" grade or better.

Complete ALL of the following Courses:
- RTH100-Principles of Respiratory Care 3 credits
- RTH130-Therapeutic Procedures 4 credits
- RTH160-Resp Therapy Pharmacology 2 credits
- RTH170-Therapeutic Procedures II 4 credits
- RTH180-RT Clinical Sciences 3 credits
- RTH195-Intro to Clinical Therapeutics 1.5 credits
- RTH210-Ventilator Mgt 1 4 credits
- RTH220-Respiratory Care Neo & Pediatr 1.5 credits
- RTH240-Cardiopulmonary Diagnostics 1.5 credits
- RTH250-Advance Mechanical Ventilation 4 credits
- RTH270-Therapeutic Clinical Mgt 2 credits
- RTH285-Advanced Respiratory Concepts 3 credits
- RTH288-Interm. Clinical Therapies 2 credits
- RTH295-Clinical Therapeutics Practic. 7 credits
- RTH298-Adv. Clinical Therapeutic Prac 7 credits

Support Course Requirements

Respiratory Therapist AAS - Support Course Requirements
Type
Completion Requirement

Complete ALL of the following Courses:
- BIO234-Anatomy and Physiology II 4 credits
- ENG131-Introduction College Writing 3 credits
- HCS131-Computers in Health Care 3 credits

Social Science

Complete one Political Science (POLS), Psychology (PSY), or Sociology (SOC) course.

Complete at least 1 courses in the following course sets:
- CAT4 - Gen Ed Applied - 2020

Additional Comments:
See General Education Requirements for Applied Degrees for details.

RESTSER.CA - Restaurant Service

Program Information

Program Title
Restaurant Service Career Certificate

Program Code
RESTSER.CA

Degree Type
Certificate of Achievement

Minimum Credits for Program Completion
17

Program Eligible for Financial Aid?
Yes

Subject
Culinary Arts, Hospitality Mgm

Semesters to Complete Program
3

Program Description
Provides a variety of skills that are necessary to address the opportunities and challenges found within the different types of dining operations. An emphasis is placed on remarkable service from servers, managers, and restaurant owners that can lead to winning and retaining customers.

Courses in the Restaurant Service Certificate Program may be applied toward an Associate in Applied Science Degree in Culinary Arts and/or an Associate in Applied Science Degree in Hotel/Restaurant Management.

Faculty Contact
Eric Gackenbach

Faculty Contact Email
epgackenbach@hfcc.edu

Faculty Contact Phone
313-317-1572

Faculty Contact Office Location
N-155B

Academic Advisor
Ashlei Chears

Academic Advisor Contact Email
achears@hfcc.edu

Academic Advisor Contact Phone
313-845-6486

Academic Advisor Office Location
E-211H

School
Business, Entrepreneurship, PD

Academic Department
Culinary Arts + Hospitality Management

Admissions Requirements

Admissions Requirements
Official HFC chef's uniform required to be purchased prior to beginning classes for culinary lab courses - contact department on process to order uniforms. Visit the Hospitality Department in M-163 in the Culinary Arts & Student Center building, or online at https://culinary.hfcc.edu/ for uniform ordering information.

Program Learning Outcomes

Relate restaurant operations and scenarios to FDRP standards and procedures.

Based on MLCC and MRA standards, assess when and how beer, wine and spirits are served in a licensed establishment.

Based on NRA standards, decide how to handle various types of food in order to prevent food borne illness.

What Classes do I take?

2-Year Plan
Restaurant Service - CA: Recommended Sequence - Current
Total Credits
17
Description
Enrollment Status: Full Time

If you have questions about the order in which you should take these courses, or the availability of these courses, please contact your advisor or the faculty contact listed below.

Program Contact Information

Office Contact: School of Business, Entrepreneurship, and Professional Development: 313-845-9645, bepdinfo@hfcc.edu, Technology Bldg, Room: E-211

Faculty Contact: Eric Gackenbach: 313-317-1572, epgackenbach@hfcc.edu, Campus Safety, Room: N-155B

Academic Advisor: Ashlei Chears: 313-845-6486, achears@hfcc.edu, Technology Bldg, Room: E-211H

For students in an older version of this program, please visit Henry Ford College Catalog Archive to view required courses.

Year	Semester	Semester Credits
Year 1	Fall	6

Courses
- HOSP101 - Wines of the World

Semester Credits 1
Contact Hours 16

Courses
- HOSP105 - Applied Food Service Sanitation

Semester Credits 2
Contact Hours 32

Courses
- HOSP251 - Dining Room Service and Operations

Semester Credits 3
Contact Hours 62

Year	Semester	Semester Credits
Year 1	Winter	10

Courses
- HOSP103 - Major Wines Grape Varieties

Semester Credits 1
Contact Hours 16

Courses
- HOSP211 - Introduction to the Hospitality Industry

Semester Credits 3
Contact Hours 47

Courses
- HOSP309 - Meetings and Event Planning

Semester Credits
3
Contact Hours
62

Courses
- HOSP325 - Dining Room Captain

Semester Credits
3
Contact Hours
62

Year	Semester	Semester Credits
Year 1	Summer	1

Courses
- HOSP107 - Artisanal Cheese and Craft Beer

Semester Credits
1
Contact Hours
16

Program Requirements

Minimum Credits for Program Completion
17

Minimum GPA required for Graduation
2.000

HFC Credit Hour Residency Requirement
20

Simple Requisites

Core Course Requirements

Restaurant Service Career CA - Core Course Requirements
Type
Completion Requirement

Complete ALL of the following Courses:
- HOSP101-Wines of the World 1 credits
- HOSP103-Maj Wine Grape Var 1 credits
- HOSP105-Applied Food Serv Sanitation 2 credits
- HOSP107-Artisanal Cheese & Craft Beer 1 credits
- HOSP211-Intro to Hospitality Industry 3 credits
- HOSP251-Dining Room Service & Operati 3 credits
- HOSP309-Meetings and Event Planning 3 credits
- HOSP325-Dining Room Captain 3 credits

SCIENCE.AS - Science

Program Information

Program Title
Science AS Degree

Program Code
SCIENCE.AS

Degree Type
Associate in Science

Minimum Credits for Program Completion
60

Program Eligible for Financial Aid?
Yes

Subject
Science Education

Semesters to Complete Program
4

Program Description
Allows individuals to explore a wide range of science and math courses before transferring to a four-year academic institution to complete a bachelor s degree.

Faculty Contact
Jolie Stepaniak

Faculty Contact Email
jastepaniak@hfcc.edu

Faculty Contact Phone
313-845-9646

Faculty Contact Office Location
J-114C

Academic Advisor
Elyse Hogan

Academic Advisor Contact Email
echogan@hfcc.edu

Academic Advisor Contact Phone
313-845-9730

Academic Advisor Office Location
J-114A

School
Science, Tech, Engr & Math

Academic Department
Mathematics

Program Learning Outcomes

Demonstrate a knowledge base in general science.

Demonstrate an understanding of how scientific knowledge is constructed, and how this process relies on evidence rather than opinions or beliefs.

Design and carry out a scientific investigation using appropriate experimental design and methodology.

Analyze and interpret information from various sources, including experimental data and scientific literature.

Convey scientific explanations using proper written and/or verbal English.

What Classes do I take?

2-Year Plan
Science - AS: Recommended Sequence - Current
Total Credits
60
Description
Enrollment Status: Full Time

If you have questions about the order in which you should take these courses, or the availability of these courses, please contact your advisor or the faculty contact listed below.

Program Contact Information

Office Contact: School of Science, Technology, Engineering, and Mathematics (STEM): 313-845-9632, steminfo@hfcc.edu, Health Careers Education Ctr, Room: G-110, G-122 and J-115

Faculty Contact: Jolie Stepaniak: 313-845-9646, jastepaniak@hfcc.edu, Science Bldg, Room: J-114C

Academic Advisor: Elyse Hogan: 313-845-9730, echogan@hfcc.edu, Science Bldg, Room: J-114A

For students in an older version of this program, please visit Henry Ford College Catalog Archive to view required courses.

Year	Semester	Semester Credits
Year 1	Fall	14

Courses
- ENG131 - Introduction to College Writing
  OR
- ENG131A - Introduction to College Writing (ALP)
  OR
- ENG131H - Honors Introduction to College Writing

Semester Credits 3
Contact Hours 47

Courses
- CAT3 - Coll Algebra - Gen Ed Transfer - 2020
  OR
- CAT3 - Quant Lit - Gen Ed Transfer - 2025
  OR
- CAT3 Stats - Gen Ed Transfer - 2025

Semester Credits 4
Contact Hours 62

Courses
- CAT6 - Transfer - Lec and Lab - 2025
  OR
- CAT6 - Transfer - Lec Only - 2020
  OR
- CAT6 - Gen Ed Transfer - Lab Only - 2020

Semester Credits 4
Contact Hours 62

Courses
- CAT4 - Gen Ed Transfer - 2020

Semester Credits 3
Contact Hours 47

Year	Semester	Semester Credits

Year	Semester	Semester Credits
Year 1	Winter	16

Courses
- CIS100 - Introduction to Information Technology

Semester Credits
3
Contact Hours
47

Courses
- ENG132 - College Writing and Research
  OR
- ENG132H - Honors College Writing and Research
  OR
- ENG135 - Business & Technical Writing & Research

Semester Credits
3
Contact Hours
47

Courses
- CAT6 - Transfer - Lec and Lab - 2025
  OR
- CAT6 - Transfer - Lec Only - 2020
  OR
- CAT6 - Gen Ed Transfer - Lab Only - 2020

Semester Credits
4
Contact Hours
62

Courses
- Electives: Complete additional 100-level, or higher, credits to complete this degree. (Generic)

Semester Credits
6
Contact Hours
94

Year	Semester	Semester Credits
Year 2	Fall	14

Courses
- CAT4 - Gen Ed Transfer - 2020

Semester Credits
3
Contact Hours
47

Courses
- CAT5 - Gen Ed Transfer - 2025

Semester Credits
3
Contact Hours
47

Courses
- CAT6 - Transfer - Lec and Lab - 2025
  OR
- CAT6 - Transfer - Lec Only - 2020
  OR
- CAT6 - Gen Ed Transfer - Lab Only - 2020

Semester Credits
8
Contact Hours
124

Year	Semester	Semester Credits
Year 2	Winter	16

Courses
- CAT5 - Gen Ed Transfer - 2025

Semester Credits
3
Contact Hours
47

Courses
- CAT6 - Transfer - Lec and Lab - 2025
  OR
- CAT6 - Transfer - Lec Only - 2020
  OR
- CAT6 - Gen Ed Transfer - Lab Only - 2020

Semester Credits
8
Contact Hours
124

Courses
- Electives: Complete additional 100-level, or higher, credits to complete this degree. (Generic)

Semester Credits
5
Contact Hours
79

Program Requirements

Minimum Credits for Program Completion
60

Minimum GPA required for Graduation
2.000

HFC Credit Hour Residency Requirement
20

Simple Requisites

Core Course Requirements

Science AS - Core Course Requirements
Type
Completion Requirement

Natural Science

Complete 24 natural science credits, including at least one class with laboratory experience, from at least two different disciplines. See Degree Specific Requirements for details.

Earn at least 24 credits

Support Course Requirements

Science AS - Support Course Requirements
Type
Completion Requirement

Category 1: English Composition

Complete at least 1 of the following courses:
- ENG131-Introduction College Writing 3 credits
  OR ENG131A-Intro College Writing (ALP) 3 credits
  OR ENG131H-Honors Intro College Writing 3 credits

English Composition or Communication

Complete at least 1 of the following courses:
- ENG132-College Writing and Research 3 credits
  OR ENG132H-Honors Coll Writing & Research 3 credits
  OR ENG135-Bus & Tech Writing & Research 3 credits

Electives

Earn at least 11 credits

General Education Requirements

Science AS - General Education Requirements
Type
Completion Requirement

Category 3: Mathematics

Complete any one from the General Education Requirements for Transfer Degrees (MTA) list, however, students should consult the requirements of their transfer program when selecting a math course.

Complete at least 1 courses in the following course sets:
- CAT3 - Coll Algebra - Gen Ed Transfer - 2020
- CAT3 - Quant Lit - Gen Ed Transfer - 2025
- CAT3 Stats - Gen Ed Transfer - 2025

Category 4: Social Sciences

Complete any two, from different disciplines, from the General Education Requirements for Transfer Degrees (MTA) list.

Complete at least 2 courses in the following course sets:
- CAT4 - Gen Ed Transfer - 2020

Category 5: Humanities and Fine Arts

Complete any two, from different disciplines, from the General Education Requirements for Transfer Degrees (MTA) list.

Complete at least 2 courses in the following course sets:
- CAT5 - Gen Ed Transfer - 2025

Additional Comments:
See General Education Requirements for Transfer Degrees for details.

Degree Specific Requirements

Science AS - Degree Specific Course Requirements
Type
Completion Requirement

Computer Technology

Complete ALL of the following Course Sets:
- Computer Technology - 2020

Additional Comments:
See Degree Specific Requirements for details.

SCMGMT.AB - Supply Chain Management

Program Information

Program Title
Supply Chain Management AB Degree

Program Code
SCMGMT.AB

Degree Type
Associate in Business

Minimum Credits for Program Completion
60

Program Eligible for Financial Aid?
Yes

Subject
Supply Chain Management

Semesters to Complete Program
4

Program Description
Covers the planning, organizing, leading, and controlling of all materials, resources, and information involved in the sourcing, processing, and distributing of products that add value to the wholesale or retail consumer. Focuses on the global coordination and collaboration with partners, suppliers, intermediaries, and third party logistic providers to meet or exceed the ever changing needs of the customer.

Faculty Contact
Diana Baran

Faculty Contact Email
dbaran@hfcc.edu

Faculty Contact Phone
313-317-1583

Faculty Contact Office Location
K-327

Academic Advisor
Ashlei Chears

Academic Advisor Contact Email
achears@hfcc.edu

Academic Advisor Contact Phone
313-845-6486

Academic Advisor Office Location
E-211H

School
Business, Entrepreneurship, PD

Academic Department
Business & Economics

Program Learning Outcomes

Define supply chain management (SCM) and demonstrate knowledge in order to think critically and be able to evaluate and design SCM strategies necessary to support the firms global strategic decisions.

Assess purchasing strategies and procedures, selection of suppliers, outsourcing, and negotiation strategies, price and cost analysis.

Evaluate the managerial dimensions of operations management which include the design, supply, production, and delivery of goods and services to customers.

Summarize the five modes of transportation comparing their operating and service characteristics, cost structure, and current challenges.

Develop the knowledge necessary to become a 21st century front line worker in supply chain management and logistics.

Develop mastery of the core competencies of material handling at the front-line (entry-level to front-line supervisor) required to pass the Manufactures Skill Standards Council (MSSC) - the Certified Logistics Associate (CLA) and Certified Logistics Technician (CLT) certifications.

What Classes do I take?

2-Year Plan
Supply Chain Management - AB: Recommended Sequence - Current
Total Credits
59
Description
Enrollment Status: Full Time

If you have questions about the order in which you should take these courses, or the availability of these courses, please contact your advisor or the faculty contact listed below.

Program Contact Information

Office Contact: School of Business, Entrepreneurship, and Professional Development: 313-845-9645, bepdinfo@hfcc.edu, Technology Bldg, Room: E-211

Faculty Contact: Diana Baran: 313-317-1583, dbaran@hfcc.edu, Liberal Arts Building, Room: K-327

Academic Advisor: Ashlei Chears: 313-845-6486, achears@hfcc.edu, Technology Bldg, Room: E-211H

For students in an older version of this program, please visit Henry Ford College Catalog Archive to view required courses.

Year	Semester	Semester Credits
Year 1	Fall	16

Courses
- BBA110 - Business Grammar and Punctuation

Semester Credits
3
Contact Hours
47

Courses
- BBA131 - Introduction to Business

Semester Credits
4
Contact Hours
62

Courses
- BSC130 - Tech Foundations Supply Chain Mgt

Semester Credits
3
Contact Hours
47

Courses
- CIS100 - Introduction to Information Technology

Semester Credits 3
Contact Hours 47

Courses
- ENG131 - Introduction to College Writing

Semester Credits 3
Contact Hours 47

Year	Semester	Semester Credits
Year 1	Winter	15

Courses
- BSC230 - Logistics and Distribution Strategy

Semester Credits 3
Contact Hours 47

Courses
- BSC240 - Operations and Supply Chain Management

Semester Credits 3
Contact Hours 47

Courses
- BBA231 - Business Communications

Semester Credits 3
Contact Hours 47

Courses
- ENG132 - College Writing and Research
  OR
- ENG132H - Honors College Writing and Research
  OR
- ENG135 - Business & Technical Writing & Research

Semester Credits 3
Contact Hours 47

Courses
- BMA110 - Business Math
  OR
- MATH115 - College Algebra
  OR
- MATH131 - Mathematics for the Modern World
  OR
- MATH141 - Introduction to Statistics
  OR
- MATH175 - Precalculus
  OR
- MATH180 - Calculus I
  OR
- MATH183 - Calculus II
  OR
- MATH275 - Discrete Mathematics
  OR
- MATH280 - Calculus III
  OR
- MATH283 - Linear Algebra
  OR
- MATH288 - Differential Equations

Semester Credits 3
Contact Hours 47

Year	Semester	Semester Credits
Year 2	Fall	15

Courses
- BEC151 - Principles of Macroeconomics

Semester Credits 3
Contact Hours 47

Courses
- BSC250 - Purchasing and Supply Chain Management

Semester Credits 3
Contact Hours 47

Courses
- BSC260 - Global Logistics & Supply Chain Mgmt

Semester Credits 3
Contact Hours 47

Courses
- MGT231 - Leadership and Teambuilding

Semester Credits 3
Contact Hours 47

Courses
- BBA250 (inactive) (Generic)
  OR
- BBA252 - Principles of Marketing

Semester Credits 3
Contact Hours 47

Year	Semester	Semester Credits
Year 2	Winter	13

Courses
- BCA145 - Spreadsheets

Semester Credits 3
Contact Hours 47

Courses
- BEC152 - Principles of Microeconomics

Semester Credits
3
Contact Hours
47

Courses
- BLW253 - Business Law and the Legal Environment

Semester Credits
4
Contact Hours
62

Courses
- GEOG132 - World Regional Geography

Semester Credits
3
Contact Hours
47

Program Requirements

Minimum Credits for Program Completion
60
Minimum GPA required for Graduation
2.000
HFC Credit Hour Residency Requirement
20

Simple Requisites

Core Course Requirements

Supply Chain Management AB - Core Course Requirements
Type
Completion Requirement

Complete ALL of the following Courses:
- BLW253-Business Law & Legal Environme 4 credits
- BSC130-Tech Foundation SCM 3 credits
- BSC230-Logistics & Distribution Strat 3 credits
- BSC240-Operations & Supply Chain Mgmt 3 credits
- BSC250-Purchasing & Supply Chain Mgmt 3 credits
- BSC260-Global Logistics Supply Chain 3 credits

Support Course Requirements

Supply Chain Management AB - Support Course Requirements
Type
Completion Requirement

Complete ALL of the following Courses:
- BBA110-Business Grammar & Punctuation 3 credits
- BBA131-Intro to Business 4 credits
- BBA231-Business Communications 3 credits
- BCA145-Spreadsheets 3 credits
- BEC151-Prin Macro Economics 3 credits
- BEC152-Prin Micro Economics 3 credits
- CIS100-Intro Info Tech 3 credits
- ENG131-Introduction College Writing 3 credits
- GEOG132-World Regional Geography 3 credits
- MGT231-Leadership and Teambuilding 3 credits
- BBA252-Principles of Marketing 3 credits

Category 2: English Composition or Communications

Complete at least 1 of the following courses:
- ENG132-College Writing and Research 3 credits
  OR ENG132H-Honors Coll Writing & Research 3 credits
  OR ENG135-Bus & Tech Writing & Research 3 credits

Category 3: Mathematics

Complete at least 1 of the following courses:
- BMA110-Business Math 3 credits
  OR MATH115-College Algebra 5 credits
  OR MATH131-Math for the Modern World 4 credits
  OR MATH141-Introduction to Statistics 4 credits
  OR
  OR MATH175-Precalculus 5 credits
  OR MATH180-Calculus 1 5 credits
  OR MATH183-Calculus II 5 credits
  OR MATH275-Discrete Mathematics 4 credits
  OR MATH280-Calculus III 5 credits
  OR MATH283-Linear Algebra 3 credits
  OR MATH288-Differential Equations 5 credits

Electives

Complete additional 100-level, or higher, credits to complete this degree.

Earn at least 1 credits from the following:
- Gen Ed - 1 hr - 2025

Additional Comments:
See General Education Requirements for Applied Degrees for details.

SMBUSMGMT.CA - Small Business Management & Entrepreneurship

Program Information

Program Title
Small Business Management & Entrepreneurship Certificate
Program Code
SMBUSMGMT.CA
Degree Type
Certificate of Achievement
Minimum Credits for Program Completion
31
Program Eligible for Financial Aid?
Yes
Subject
Management
Semesters to Complete Program
2
Program Description
Prepares students who are contemplating starting their own business or who currently own and operate their own business. This certificate focuses on accounting and finance, customer service, marketing, and management. Students will prepare a business plan for a business of their choice. The Small Business Management & Entrepreneurship certificate may be used as a building block towards earning an associate s degree in Management.

Faculty Contact
Corinne Asher
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casher@hfcc.edu
Faculty Contact Phone
313-845-9867
Faculty Contact Office Location
K-325
Academic Advisor
Ashlei Chears
Academic Advisor Contact Email
achears@hfcc.edu
Academic Advisor Contact Phone
313-845-6486
Academic Advisor Office Location
E-211H
School
Business, Entrepreneurship, PD
Academic Department
Business & Economics

Program Learning Outcomes

Interpret basic financial statements.

Apply management theory to effectively supervise the human resources of an organization.

Evaluate management decisions given an organizations relationship to the external business environment.

Recognize common problems in managing an organization.

Employ computer applications to perform business activities.

What Classes do I take?

2-Year Plan
Small Business Management & Entrepreneurship - CA: Recommended Sequence - Current
Total Credits
29
Description
Enrollment Status: Full Time

If you have questions about the order in which you should take these courses, or the availability of these courses, please contact your advisor or the faculty contact listed below.

Program Contact Information

Office Contact: School of Business, Entrepreneurship, and Professional Development: 313-845-9645, bepdinfo@hfcc.edu, Technology Bldg, Room: E-211

Faculty Contact: Corinne Asher: 313-845-9867, casher@hfcc.edu, Liberal Arts Building, Room: K-325

Academic Advisor: Ashlei Chears: 313-845-6486, achears@hfcc.edu, Technology Bldg, Room: E-211H

For students in an older version of this program, please visit Henry Ford College Catalog Archive to view required courses.

Year	Semester	Semester Credits
Year 1	Fall	16

Courses
- BBA131 - Introduction to Business

Semester Credits 4
Contact Hours 62

Courses
- BBA153 - Customer Service

Semester Credits 3
Contact Hours 47

Courses
- BFN141 - Personal Finance

Semester Credits 3
Contact Hours 47

Courses
- CIS100 - Introduction to Information Technology

Semester Credits 3
Contact Hours 47

Courses
- MGT241 - Small Bus Mgt & Entrepreneurship

Semester Credits 3
Contact Hours 47

Year	Semester	Semester Credits
Year 1	Winter	13

Courses
- BBA252 - Principles of Marketing

Semester Credits 3
Contact Hours 47

Courses
- MGT230 - Principles of Management

Semester Credits
3
Contact Hours
47

Courses
- MGT231 - Leadership and Teambuilding

Semester Credits
3
Contact Hours
47

Courses
- BAC110 - Practical Accounting
  OR
- BAC131 - Introduction to Financial Accounting

Semester Credits
4
Contact Hours
62

Program Requirements

Minimum Credits for Program Completion
31

Minimum GPA required for Graduation
2.000

HFC Credit Hour Residency Requirement
20

Simple Requisites

Core Course Requirements

Small Business Management & Entrepreneurship CA - Core Course Requirements
Type
Completion Requirement

Complete ALL of the following Courses:
- BBA131-Intro to Business 4 credits
- BBA153-Customer Service 3 credits
- BBA252-Principles of Marketing 3 credits
- BFN141-Personal Finance 3 credits
- CIS100-Intro Info Tech 3 credits
- MGT230-Principles of Management 3 credits
- MGT231-Leadership and Teambuilding 3 credits
- MGT241-Small Bus Mgmt & Entrepreneur 3 credits
- BAC141-Computerized Acct - QB 2 credits

Accounting

Complete at least 1 of the following courses:
- BAC110-Practical Accounting 4 credits
  OR BAC131-Intro to Financial Accounting 4 credits

SMTECH.CA - Supply Chain Management Technician

Program Information

Program Title
Supply Chain Management Technician Certificate

Program Code
SMTECH.CA

Degree Type
Certificate of Achievement

Minimum Credits for Program Completion
32

Program Eligible for Financial Aid?
Yes

Subject
Supply Chain Management

Semesters to Complete Program
2

Program Description
Presents practical skills and knowledge for front line workers who are interested in entering the field of logistics and supply chain management. Introduces the basic business functions and their relations to the field of supply chain management, logistics, transportation and warehouse management. Provides fundamental reading, writing, mathematics, computer, and spreadsheets skills.

Faculty Contact
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Faculty Contact Office Location
K-327

Academic Advisor
Ashlei Chears

Academic Advisor Contact Email
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Academic Advisor Contact Phone
313-845-6486

Academic Advisor Office Location
E-211H

School
Business, Entrepreneurship, PD

Academic Department
Business & Economics

Program Learning Outcomes

Develop a working knowledge necessary to become a 21st century front line worker in supply chain management and logistics.

Develop mastery of the core competencies of material handling at the front-line (entry-level to front-line supervisor) required to pass MSCC CLA/CLT certification test.

Demonstrate a working knowledge and basic skills specifically in the areas of logistics, transportation, and warehouse management.

Exhibit proper communication, computer, and mathematics skills necessary for an entry-level position in supply chain management.

What Classes do I take?

2-Year Plan
Supply Chain Management Technician - CA: Recommended Sequence - Current
Total Credits
32
Description
Enrollment Status: Full Time

If you have questions about the order in which you should take these courses, or the availability of these courses, please contact your advisor or the faculty contact listed below.

Program Contact Information

Office Contact: School of Business, Entrepreneurship, and Professional Development: 313-845-9645, bepdinfo@hfcc.edu, Technology Bldg, Room: E-211

Faculty Contact: Diana Baran: 313-317-1583, dbaran@hfcc.edu, Liberal Arts Building, Room: K-327

Academic Advisor: Ashlei Chears: 313-845-6486, achears@hfcc.edu, Technology Bldg, Room: E-211H

For students in an older version of this program, please visit Henry Ford College Catalog Archive to view required courses.

Year	Semester	Semester Credits
Year 1	Fall	17

Courses
- BBA110 - Business Grammar and Punctuation

Semester Credits 3
Contact Hours 47

Courses
- BBA131 - Introduction to Business

Semester Credits 4
Contact Hours 62

Courses
- BSC130 - Tech Foundations Supply Chain Mgt

Semester Credits 3
Contact Hours 47

Courses
- BLW253 - Business Law and the Legal Environment

Semester Credits 4
Contact Hours 62

Courses
- CIS100 - Introduction to Information Technology

Semester Credits 3
Contact Hours 47

Year	Semester	Semester Credits
Year 1	Winter	15

Courses
- BBA231 - Business Communications

Semester Credits 3
Contact Hours 47

Courses
- BCA145 - Spreadsheets

Semester Credits
3
Contact Hours
47

Courses
- BSC230 - Logistics and Distribution Strategy

Semester Credits
3
Contact Hours
47

Courses
- BSC240 - Operations and Supply Chain Management

Semester Credits
3
Contact Hours
47

Courses
- BMA110 - Business Math
  OR
- MATH115 - College Algebra
  OR
- MATH131 - Mathematics for the Modern World
  OR
- MATH141 - Introduction to Statistics
  OR
- MATH165 - Mathematics for Calculus
  OR
- MATH175 - Precalculus
  OR
- MATH180 - Calculus I
  OR
- MATH183 - Calculus II
  OR
- MATH275 - Discrete Mathematics
  OR
- MATH280 - Calculus III
  OR
- MATH283 - Linear Algebra
  OR
- MATH288 - Differential Equations

Semester Credits
3
Contact Hours
47

Program Requirements

Minimum Credits for Program Completion
32

Minimum GPA required for Graduation
2.000

HFC Credit Hour Residency Requirement
20

Simple Requisites

Core Course Requirements

Supply Chain Management Technician CA - Core Course Requirements
Type
Completion Requirement

Complete ALL of the following Courses:
- BLW253-Business Law & Legal Environme 4 credits
- BSC130-Tech Foundation SCM 3 credits
- BSC230-Logistics & Distribution Strat 3 credits
- BSC240-Operations & Supply Chain Mgmt 3 credits

Support Course Requirements

Supply Chain Management Technician CA - Support Course Requirements
Type
Completion Requirement

Complete ALL of the following Courses:
- BBA110-Business Grammar & Punctuation 3 credits
- BBA131-Intro to Business 4 credits
- BBA231-Business Communications 3 credits
- BCA145-Spreadsheets 3 credits
- CIS100-Intro Info Tech 3 credits

Category 3: Mathematics

Complete at least 1 of the following courses:
- BMA110-Business Math 3 credits
  OR MATH115-College Algebra 5 credits
  OR MATH131-Math for the Modern World 4 credits
  OR MATH141-Introduction to Statistics 4 credits
  OR
  OR MATH165-Mathematics for Calculus 6 credits
  OR MATH175-Precalculus 5 credits
  OR MATH180-Calculus 1 5 credits
  OR MATH183-Calculus II 5 credits
  OR MATH275-Discrete Mathematics 4 credits
  OR MATH280-Calculus III 5 credits
  OR MATH283-Linear Algebra 3 credits
  OR MATH288-Differential Equations 5 credits

SOCWRKCOUNS.AA - Social Work and Counseling

Program Information

Program Title
Social Work and Counseling

Program Code
SOCWRKCOUNS.AA

Degree Type
Associate in Arts

Minimum Credits for Program Completion
60

Program Eligible for Financial Aid?
Yes

Subject
Social Work

Semesters to Complete Program
4

Program Description
Provides knowledge, skills, and abilities necessary to work in a wide variety of health and human service agencies as assistants to licensed professionals or transfer to a university to pursue a Bachelor's degree. Areas of pursuit, either as a technician or through transfer for additional studies and potential licensure, include social work, counseling, special education, substance abuse, gerontology, and human resource development. Students may participate at a supervised field experience in cooperation with mental health agencies including mental health clinics, drug and alcohol abuse centers, special education facilities and programs, community action programs, public assistance offices, hospitals, rehabilitation programs, and residential care programs. Students in the technician pathway have the opportunity to work with a variety of clients including the terminally ill, those with AIDS, the developmentally disabled, and geriatric clients.

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Faculty Contact Office Location
A-117F

Academic Advisor
Hannah Doederlein

Academic Advisor Contact Email
hrdoederlein@hfcc.edu

Academic Advisor Contact Phone
313-317-6868

Academic Advisor Office Location
G-203A

School
Health & Human Services

Academic Department
Health Careers, Education, and Human Services

Admissions Requirements

Admissions Requirements
Health Appraisal

Potential students must have an interest in working with the ill and disabled. Good physical strength, observation skills, and communication skills are just some of the abilities required for this job. A more detailed sample job profile is available through the Health Careers Office 313-845-9877. Each student must pass a basic physical examination prior to prior to the start of clinical (may include checking blood titers for immunity, vaccinations required by health care community, tuberculosis screening). Any students requesting special accommodations for program admission and progression should contact the Assisted Learning Office at 313-845-9617.

Criminal Background Check and Drug Screen

Consistent with Section 20173 of the Michigan Public Health Code and the requirements of our clinical affiliates, a Criminal Background Check and Drug Screen clearance (on first test) is required for all students in SWK program prior to beginning clinical assignments. The cost for this test is in addition to the basic tuition and fee schedule. For questions regarding this policy, contact the Health Careers Office.

The following are a list of some of the reasons students will be denied registration into courses with field experience, based on the criminal background check:

1. A conviction of a felony or conviction of an attempt to commit a felony within fifteen years preceding the start of the program.
2. A conviction of a misdemeanor involving abuse, neglect, assault, battery, or criminal sexual conduct, or involving fraud or theft, within fifteen years preceding the start of the program.
3. A conviction of a misdemeanor within five years preceding the start of the program.

In order to obtain certification students must also meet all state requirements at State of Michigan Licensing and Regulations

Students who are not cleared for clinical through the health appraisal, criminal background check and have not passed the drug screen on the first test will not be able to complete the SWK program.

CPR

Students must maintain a valid American Heart Association (AHA), Basic Life Support for Healthcare Provider card throughout the Clinical Externships. May be fulfilled by taking AH-105: Basic Life Support for Healthcare Providers.

Program Learning Outcomes

Discuss and interpret the history of the social work profession and current mental health issue trends.

Apply the different treatment modalities as appropriate to the role of a social work/counseling technician.

Apply the profession's ethical standards and principles including practice with respect and without discrimination.

Apply critical thinking skills within the context of professional mental health and social work practices.

Research the various public health services that provide counseling, mental health and social work services.

What Classes do I take?

2-Year Plan
Social Work and Counseling - AA: Transfer Option-Recommended Sequence - Current
Total Credits
58
Description
Enrollment Status: Full Time

If you have questions about the order in which you should take these courses, or the availability of these courses, please contact your advisor or the faculty contact listed below.

Program Contact Information

Office Contact: School of Health and Human Services: 313-845-9877, hhsinfo@hfcc.edu, Health Careers Education Ctr, Room: G-132

Faculty Contact: Imad Nouri: 313-845-9750, inouri@hfcc.edu Learning Success Center, Room: A-117F

Academic Advisor: Hannah Doederlein: 313-317-6868, hrdoederlein@hfcc.edu, Health Careers Bldg, Room: G-203A

For students in an older version of this program, please visit Henry Ford College Catalog Archive to view required courses.

Year	Semester	Semester Credits
Year 1	Fall	15

Courses
- SWK131 - Introduction to Social Work

Semester Credits
3
Contact Hours
47

Courses
- PSY131 - Introductory Psychology

Semester Credits
3
Contact Hours
47

Courses
- ENG131 - Introduction to College Writing

Semester Credits
3
Contact Hours
47

Courses
- SOC131 - Introduction to Sociology

Semester Credits
3
Contact Hours
47

Courses
- SPC131 - Intro to Public Speaking

Semester Credits
3
Contact Hours
47

Year	Semester	Semester Credits
Year 1	Winter	16

Courses
- SWK150 - Counseling and Interviewing Skills

Semester Credits
3
Contact Hours
47

Courses
- SWK160 - Interpersonal Dyn: Theories & Practices

Semester Credits
3
Contact Hours
47

Courses
- ENG132 - College Writing and Research

Semester Credits
3
Contact Hours
47

Courses
- WR131 - Religious Traditions in the World

Semester Credits
3
Contact Hours
47

Courses
- CAT3 - Coll Algebra - Gen Ed Transfer - 2020
  OR
- CAT3 - Quant Lit - Gen Ed Transfer - 2025
  OR
- CAT3 Stats - Gen Ed Transfer - 2025

Semester Credits
4
Contact Hours
62

Year	Semester	Semester Credits
Year 2	Fall	14

Courses
- SWK201 - Group Dynamic: Theories and Practices

Semester Credits
4
Contact Hours
62

Courses
- PSY251 - Abnormal Psychology

Semester Credits
3
Contact Hours
47

Courses
- CAT6 - Transfer - Lec and Lab - 2025
  OR
- CAT6 - Transfer - Lec Only - 2020
  OR
- CAT6 - Gen Ed Transfer - Lab Only - 2020

Semester Credits 4
Contact Hours 62

Courses
- CIS100 - Introduction to Information Technology
  OR
- HCS131 - Computers in Health Care

Semester Credits 3
Contact Hours 47

Year	Semester	Semester Credits
Year 2	Winter	13

Courses
- SWK202 - Family Systems: Theories and Practices

Semester Credits 4
Contact Hours 62

Courses
- PSY253 - Lifespan Development

Semester Credits 3
Contact Hours 47

Courses
- ANTH131 - Introduction to Anthropology

Semester Credits 3
Contact Hours 47

Courses
- CAT6 - Transfer - Lec and Lab - 2025
  OR
- CAT6 - Transfer - Lec Only - 2020
  OR
- CAT6 - Gen Ed Transfer - Lab Only - 2020

Semester Credits 3
Contact Hours 47

2-Year Plan
Social Work and Counseling - AA: Technician Option-Recommended Sequence - Current
Total Credits
63
Description
Enrollment Status: Full Time

If you have questions about the order in which you should take these courses, or the availability of these courses, please contact your advisor or the faculty contact listed below.

Program Contact Information

Office Contact: School of Health and Human Services: 313-845-9877, hhsinfo@hfcc.edu, Health Careers Education Ctr, Room: G-132

Faculty Contact: Imad Nouri: 313-845-9750, inouri@hfcc.edu Learning Success Center, Room: A-117F

Academic Advisor: Hannah Doederlein: 313-317-6868, hrdoederlein@hfcc.edu, Health Careers Bldg, Room: G-203A

For students in an older version of this program, please visit Henry Ford College Catalog Archive to view required courses.

Year	Semester	Semester Credits
Year 1	Fall	15

Courses
- SWK131 - Introduction to Social Work

Semester Credits 3
Contact Hours 47

Courses
- PSY131 - Introductory Psychology

Semester Credits 3
Contact Hours 47

Courses
- ENG131 - Introduction to College Writing

Semester Credits 3
Contact Hours 47

Courses
- SOC131 - Introduction to Sociology

Semester Credits 3
Contact Hours 47

Courses
- SPC131 - Intro to Public Speaking

Semester Credits 3
Contact Hours 47

Year	Semester	Semester Credits
Year 1	Winter	16

Courses
- SWK150 - Counseling and Interviewing Skills

Semester Credits 3
Contact Hours 47

Courses
- SWK160 - Interpersonal Dyn: Theories & Practices

Semester Credits 3
Contact Hours 47

Courses
- ENG132 - College Writing and Research

Semester Credits
3
Contact Hours
47

Courses
- WR131 - Religious Traditions in the World

Semester Credits
3
Contact Hours
47

Courses
- CAT3 - Coll Algebra - Gen Ed Transfer - 2020
  OR
- CAT3 - Quant Lit - Gen Ed Transfer - 2025
  OR
- CAT3 Stats - Gen Ed Transfer - 2025

Semester Credits
4
Contact Hours
62

Year	Semester	Semester Credits
Year 2	Fall	14

Courses
- SWK201 - Group Dynamic: Theories and Practices

Semester Credits
4
Contact Hours
62

Courses
- PSY251 - Abnormal Psychology

Semester Credits
3
Contact Hours
47

Courses
- CAT6 - Transfer - Lec and Lab - 2025
  OR
- CAT6 - Transfer - Lec Only - 2020
  OR
- CAT6 - Gen Ed Transfer - Lab Only - 2020

Semester Credits
4
Contact Hours
62

Courses
- CIS100 - Introduction to Information Technology
  OR
- HCS131 - Computers in Health Care

Semester Credits
3
Contact Hours
47

Year	Semester	Semester Credits
Year 2	Winter	10

Courses
- SWK202 - Family Systems: Theories and Practices

Semester Credits
4
Contact Hours
62

Courses
- PSY253 - Lifespan Development

Semester Credits
3
Contact Hours
47

Courses
- CAT6 - Transfer - Lec and Lab - 2025
  OR
- CAT6 - Transfer - Lec Only - 2020
  OR
- CAT6 - Gen Ed Transfer - Lab Only - 2020

Semester Credits
3
Contact Hours
47

Year	Semester	Semester Credits
Year 2	Summer	8

Courses
- SWK290 - Social Work Practicum

Semester Credits
8
Contact Hours
122 - 360

Simple Requisites

Core Course Requirements

Social Work and Counseling AA - Core Course Requirements
Type
Completion Requirement

Complete ALL of the following Courses:
- SWK131-Introduction to Social Work 3 credits
- SWK150-Counseling & Interviewing Skil 3 credits
- SWK160-Interpersonal Dynamics 3 credits
- SWK201-Group Dyna: Theories & Practic 4 credits
- SWK202-Family Sys: Theories & Practic 4 credits

Support Course Requirements

Social Work and Counseling AA - Support Course Requirements
Type
Completion Requirement

Complete ALL of the following Courses:
- ENG131-Introduction College Writing 3 credits
- ENG132-College Writing and Research 3 credits
- PSY131-Introductory Psychology 3 credits
- SPC131-Introduction Public Speaking 3 credits
- PSY253-Lifespan Development 3 credits
- SOC131-Introduction to Sociology 3 credits
- WR131-Relig Traditions in the World 3 credits
- PSY251-Abnormal Psychology 3 credits

Computer Technology

Complete at least 1 courses in the following course sets:
- Computer Technology - 2020

Social Work and Counseling degree pathways

Please choose one of the following options to complete your degree.

The University option is for students planning to transfer to a university to complete a Bachelor of Social Work or Counseling, please refer to articulation agreements for universities.

The Technician option is for student planning to become a Social Work Technician as either a Limited Social Service Technician (LSST) or Registered Social Service Technician (RSST).

Social Work and Counseling University Transfer Option

Take the following if you plan to transfer to a university:

2 Credits of electives (to complete 60 credits for graduation) - recommendations: HPE141 Intro to Health and Wellness, HPE 153, HPE158 Introduction to Nutrition, HPEA122 Yoga-Based Fitness, HPEA155 Relax Tech for Stress Mgmt

Complete ALL of the following Courses:
- ANTH131-Intro Anthropology 3 credits

Social Work and Counseling Technician Option

Take the following clincial field experience course if you plan to prepare for the Social Werk Technician and Counseling Certification.

Complete ALL of the following Courses:
- SWK290-Social Work Practicum 8 credits

General Education Requirements

Social Work and Counseling AA - General Education Course Requirements
Type
Completion Requirement

Category 3: Mathematics

Complete any one that meet the General Education Requirements for Transfer Degrees

Complete at least 1 courses in the following course sets:
- CAT3 - Coll Algebra - Gen Ed Transfer - 2020
- CAT3 - Quant Lit - Gen Ed Transfer - 2025
- CAT3 Stats - Gen Ed Transfer - 2025

Category 6: Natural Sciences

Complete 2 courses in Natural Sciences from the General Education Requirements for Transfer Degrees list, including one with laboratory experience, from 2 different disciplines (subjects).

Complete at least 2 courses in the following course sets:
- CAT6 - Transfer - Lec and Lab - 2025
- CAT6 - Transfer - Lec Only - 2020
- CAT6 - Gen Ed Transfer - Lab Only - 2020

Additional Comments:
See General Education Requirements for Transfer Degrees for details.

Program Requirements

Minimum Credits for Program Completion	Minimum GPA required for Graduation	HFC Credit Hour Residency Requirement
60	2.000	20

SOFTWAREENGINEER.AAS - Software Engineering

Program Information

Program Title
Software Engineering

Program Code
SOFTWAREENGINEER.AAS

Degree Type
Associate in Applied Science

Minimum Credits for Program Completion
60

Program Eligible for Financial Aid?
Yes

Subject
Computer Information Systems

Semesters to Complete Program
4

Program Description
Software engineering is the process of analyzing user needs to design, develop, test, deploy and maintain software applications. This program provides students with in-depth skills and knowledge in the Information Technology (IT) and software development areas necessary for an entry-level position or transfer preparation in software engineering, software development, database development, and systems analysis and design. This includes coursework, projects, and extensive hands-on lab work in all the latest technologies including Python, C, C++, C#, Java, SQL, HTML, JavaScript, PHP, mobile application development, secure coding, networking and operating systems (client and server) and software engineering methodologies.

Faculty Contact
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Faculty Contact Phone
313-845-1549

Faculty Contact Office Location
E-162G

Academic Advisor
DeJanae Hayes

Academic Advisor Contact Email
dhayes8@hfcc.edu

Academic Advisor Contact Phone
313-845-9792

Academic Advisor Office Location
E-211C

School
Business, Entrepreneurship, PD

Academic Department
Computer Technology

Program Learning Outcomes

- Operate a personal computer and productivity software installed on it, including Microsoft Office, file management, the Internet/Web, e-mail, and input/output/storage devices.
- Explain the importance of personal responsibility and security in a technological world, including copyright laws, netiquette, ethics, privacy issues, and security threats.
- Design, create and manipulate with an enterprise database.
- Explain networking standards, protocols, transmission media, and hardware.
- Write computer programs using several programming languages, both procedural and object-oriented.
- Explain the client-server model of web development and develop client and server-side web pages.
- Interface with the Unix/Linux operating system, including the vi editor, file management, and shell scripting.
- Analyze, design, and implement an information system.
- Create and deliver a professional team presentation.

What Classes do I take?

2-Year Plan
Software Engineering - AAS: Recommended Sequence - Current
Total Credits
47 - 49
Description
Enrollment Status: Full Time

If you have questions about the order in which you should take these courses, or the availability of these courses, please contact your advisor or the faculty contact listed below.

Program Contact Information

Office Contact: School of Business, Entrepreneurship, and Professional Development: 313-845-9645, bepdinfo@hfcc.edu, Technology Bldg, Room: E-211

Faculty Contact: Kimberly Moscardelli: 313-845-1549, kimm@hfcc.edu, Technology Bldg, Room: E-162G

Academic Advisor: DeJanae Hayes: 313-845-9792, dhayes8@hfcc.edu, Technology Bldg, Room: E-211C

For students in an older version of this program, please visit Henry Ford College Catalog Archive to view required courses.

Year	Semester	Semester Credits
Year 1	Fall	13

Courses
- CIS100 - Introduction to Information Technology

Semester Credits 3
Contact Hours 47

Courses
- CIS125 - Principles of Programming Logic

Semester Credits 4
Contact Hours 62

Courses
- CIS122 - Web Internet Technologies

Semester Credits 3
Contact Hours 62

Courses
- ENG131 - Introduction to College Writing

Semester Credits 3
Contact Hours 47

Year	Semester	Semester Credits
Year 1	Winter	13

Courses
- CIS112 - Introduction to Networking

Semester Credits 3
Contact Hours 47

Courses
- CIS129 - Intro to UNIX With Shell Scripting

Semester Credits 4
Contact Hours 62

Courses
- CIS170 - C Programming

Semester Credits 3
Contact Hours 62

Courses
- CIS119 - Math for Computer Professional
  OR
- MATH115 - College Algebra
  OR
- MATH131 - Mathematics for the Modern World
  OR
- MATH141 - Introduction to Statistics
  OR
- MATH165 - Mathematics for Calculus
  OR
- MATH175 - Precalculus
  OR
- MATH180 - Calculus I
  OR
- MATH183 - Calculus II
  OR
- MATH275 - Discrete Mathematics
  OR
- MATH280 - Calculus III
  OR
- MATH283 - Linear Algebra
  OR
- MATH288 - Differential Equations

Semester Credits 3
Contact Hours 47

Year	Semester	Semester Credits
Year 2	Fall	12 - 14

Courses
- CIS111 - SQL for Database Development

Semester Credits 3
Contact Hours 62

Courses
- CIS130 - C# Programming

Semester Credits 3
Contact Hours 62

Courses
- CIS172 - JavaScript
  OR
- CIS222 - Web Database Development with PHP
  OR
- CIS225 - Web Frameworks
  OR
- CIS230 - C++ Programming
  OR
- CIS232 - Advanced C# Database Programming
  OR
- CIS241 - Advancd Mobile App Developmnt (Android)
  OR
- CIS243 - Advanced Mobile App Development (iOS)
  OR
- CIS271 - Advanced Java

Semester Credits 3 - 4
Contact Hours 47 - 62

Courses
- CIS172 - JavaScript
  OR
- CIS222 - Web Database Development with PHP
  OR
- CIS225 - Web Frameworks
  OR
- CIS230 - C++ Programming
  OR
- CIS232 - Advanced C# Database Programming
  OR
- CIS241 - Advancd Mobile App Developmnt (Android)
  OR
- CIS243 - Advanced Mobile App Development (iOS)
  OR
- CIS271 - Advanced Java

Semester Credits 3 - 4
Contact Hours 47 - 62

Year	Semester	Semester Credits

Year 2	Winter	9

Courses
- CIS171 - Java Programming

Semester Credits
3
Contact Hours
62

Courses
- CIS294 - Software Engineering

Semester Credits
3
Contact Hours
47

Courses
- Gen Ed - 3 hrs - 2025

Semester Credits
3
Contact Hours
47

Program Requirements

Minimum Credits for Program Completion
60

Minimum GPA required for Graduation
2.000

HFC Credit Hour Residency Requirement
20

Simple Requisites

Core Course Requirements

Software Engineering AAS - Core Course Requirements
Type
Completion Requirement

Complete ALL of the following Courses:
- CIS100-Intro Info Tech 3 credits
- CIS111-SQL for Database Development 3 credits
- CIS112-Intro to Networking 3 credits
- CIS122-Web Internet Technologies 3 credits
- CIS125-Prin of Programming Logic 4 credits
- CIS129-Intro to UNIX Shell Script 4 credits
- CIS130-C# Programming 3 credits
- CIS170-C Programming 3 credits
- CIS171-Java Programming 3 credits
- CIS294-Software Engineering 3 credits

CIS Advanced Programming

Complete at least 1 of the following courses:
- CIS172-JavaScript 3 credits
  OR CIS222-Web Database Dev with PHP 4 credits
  OR CIS225-Web Frameworks 3 credits
  OR CIS230-C++ Programming 3 credits
  OR CIS232-Advanced C# Database Program 4 credits
  OR CIS241-Adv Mobile App Dev (Android) 3 credits
  OR CIS243-Advanced Mobile App Dev (iOS) 3 credits
  OR CIS271-Advanced Java 4 credits

Support Course Requirements

Software Engineering AAS - Support Course Requirements
Type
Completion Requirement

Category 1: English Composition

Complete ALL of the following Courses:
- ENG131-Introduction College Writing 3 credits

Category 3: Mathematics

Complete at least 1 of the following courses:
- CIS119-Math for Computer Professional 3 credits
  OR MATH115-College Algebra 5 credits
  OR MATH131-Math for the Modern World 4 credits
  OR MATH141-Introduction to Statistics 4 credits
  OR
  OR MATH165-Mathematics for Calculus 6 credits
  OR MATH175-Precalculus 5 credits
  OR MATH180-Calculus 1 5 credits
  OR MATH183-Calculus II 5 credits
  OR MATH275-Discrete Mathematics 4 credits
  OR MATH280-Calculus III 5 credits
  OR MATH283-Linear Algebra 3 credits
  OR MATH288-Differential Equations 5 credits

Electives

Earn at least 13 credits

Additional Comments:
Take additional 100-level or higher credits to complete this degree. These credit hours can include courses transferred in or courses taken at HFC for career preparation or university transfer. Consult the Program Lead for recommendations on career preparation courses. Consult the Program Lead, Academic Advisor and transfer/articulation agreements for recommendations on transfer courses, e.g., MATH, CHEM, BIO, PHYS, ECON.

See General Education Requirements for Applied Degrees for details

General Education Requirements

Software Engineering AAS - General Education Requirements
Type
Completion Requirement

Category 7: General Education

Complete any additional General Education Course from the list of General Education Requirements for Applied Degrees

Earn at least 3 credits

Additional Comments:

SPORTSMGMT.AA - Sports Management

Program Information

Program Title
Sports Management

Program Code
SPORTSMGMT.AA

Degree Type
Associate in Arts

Minimum Credits for Program Completion
60

Program Eligible for Financial Aid?
Yes

Subject
Exercise Science

Program Description
The Associate of Arts in Sports Management program prepares students for seamless transfer to a 4-year institution, where they can pursue advanced studies in various fields such as coaching, health and wellness, recreational and sports organizations leadership, management, and/or team leadership.

Faculty Contact
Fred Williams

Faculty Contact Email
fjwilliams3@hfcc.edu

Faculty Contact Phone
313-845-9856

Faculty Contact Office Location
G-133J

School
Health & Human Services

Academic Department
Health Careers, Education, and Human Services

Program Learning Outcomes

Demonstrate a foundational understanding of the psychosocial processes that apply to sports and exercise.

Develop strong written and oral communication abilities to manage communication with owners, media, athletes, sponsors and spectators.

Develop a holistic understanding of theories and practices for health and wellness.

Demonstrate a foundational understanding of statistical concepts and methods.

What Classes do I take?

2-Year Plan
Sports Management - AAS: Recommended Sequence - Current
Total Credits
61
Description
Enrollment Status: Full Time

If you have questions about the order in which you should take these courses, or the availability of these courses, please contact your advisor or the faculty contact listed below.

Program Contact Information

Office Contact: School of Health and Human ServicesSchool of Health and Human Services: 313-845-9877, hhsinfo@hfcc.edu, Health Careers Education Ctr, Room: G-132

Program Faculty Contact: Fred Williams: 313-845-9877, fjwilliams3@hfcc.edu Health Careers Education Ctr, Room: G-133J

For students in an older version of this program, please visit Henry Ford College Catalog Archive to view required courses.

Year	Semester	Semester Credits
Year 1	Fall	13

Courses
- ENG131 - Introduction to College Writing
  OR
- ENG131H - Honors Introduction to College Writing
  OR
- ENG132 - College Writing and Research
  OR
- ENG132H - Honors College Writing and Research

Semester Credits 3
Contact Hours 47

Courses
- Category 6: Natural Sciences: Complete any one. See General Education Requirements for details. (Generic)

Semester Credits 3
Contact Hours 47

Courses
- PSY131 - Introductory Psychology

Semester Credits 3
Contact Hours 47

Courses
- MATH115 - College Algebra
  OR
- MATH131 - Mathematics for the Modern World
  OR
- MATH141 - Introduction to Statistics
  OR
- MATH175 - Precalculus
  OR
- MATH180 - Calculus I
  OR
- MATH183 - Calculus II
  OR
- MATH275 - Discrete Mathematics
  OR
- MATH280 - Calculus III
  OR
- MATH283 - Linear Algebra
  OR
- MATH288 - Differential Equations

Semester Credits
4
Contact Hours
62

Year	Semester	Semester Credits
Year 1	Winter	15

Courses
- Category 2: English Composition or Communication: Complete any one. See General Education Requirements for details. (Generic)

Semester Credits
3
Contact Hours
47

Courses
- HPE175 - Introduction to Sports Management

Semester Credits
3
Contact Hours
47

Courses
- SOC131 - Introduction to Sociology

Semester Credits
3
Contact Hours
47

Courses
- HPE130 - Stress Management

Semester Credits
3
Contact Hours
47

Courses
- Computer Technology: Complete any one. See Computer Technology Degree Requirements for details. (Generic)

Semester Credits
3
Contact Hours
47

Year	Semester	Semester Credits
Year 2	Fall	16

Courses
- Category 6: Natural Sciences: Complete any one lab based course, from a different discipline. See General Education Requirements for details. (Generic)

Semester Credits
4
Contact Hours
62

Courses
- Category 5: Humanities: Complete any one. See General Education Requirements for details. (Generic)

Semester Credits
3
Contact Hours
47

Courses
- HPE141 - Introduction to Health and Wellness

Semester Credits
3
Contact Hours
47

Courses
- HPE224 - Sports Facilities

Semester Credits
3
Contact Hours
47

Courses
- Category 7: General Education: Complete any three (3) additional general education credits from the MTA list if needed. General Education Requirements options. (Generic)

Semester Credits
3
Contact Hours
47

Year	Semester	Semester Credits
Year 2	Winter	12

Courses
- HPE253 - Nutrition for the Professional

Semester Credits 3
Contact Hours 47

Courses
- PSY254 - Social Psychology

Semester Credits 3
Contact Hours 47

Courses
- Category 5: Humanities and Fine Arts: Complete any one from a different discipline. See General Education Requirements for details. (Generic)

Semester Credits 3
Contact Hours 47

Courses
- Students completing the Eastern Michigan University or the University of Michigan Dearborn pathway please complete one of the courses listed. Consult with your academic advisor for other electives. EMU Recommended Electives: BBA131, OR MGT231. UMD Recommended Electives: SWK131, OR AH141 (Generic)

Semester Credits 3
Contact Hours 47

Year	Semester	Semester Credits
-	-	5

Courses
- Electives (Generic)

Semester Credits 5
Contact Hours 77

Program Requirements

Minimum Credits for Program Completion
61
Minimum GPA required for Graduation
2.000
HFC Credit Hour Residency Requirement
20

Simple Requisites

Core Course Requirements

Sports Management AA - Core Course Requirements
Type
Completion Requirement

Complete ALL of the following Courses:
- HPE130-Stress Management 3 credits
- HPE141-Intro to Health and Wellness 3 credits
- HPE175-Intro to Sports Management 3 credits
- HPE224-Sports Facilities 3 credits
- HPE253-Nutrition for the Professional 3 credits
- PSY254-Social Psychology 3 credits

Support Course Requirements

Sports Management AA - Support Course Requirements
Type
Completion Requirement

Eastern Michigan University- Recommended Electives

Complete at least 1 of the following courses:
- BBA131-Intro to Business 4 credits
  OR MGT231-Leadership and Teambuilding 3 credits

University of Michigan Dearborn Pathway- Recommended Courses

Complete at least 1 of the following courses:
- SWK131-Introduction to Social Work 3 credits
  OR AH141-Introduction to Public Health 3 credits

Electives

Earn at least 6 credits

General Education Requirements

Sports Management AA - General Education Course Requirements
Type
Completion Requirement

Category 1: English Composition

Complete any one course from the General Education Requirements for Transfer Degrees (MTA) list.

Complete at least 1 courses in the following course sets:
- CAT1 - Gen Ed Transfer - 2020

Category 2: English Composition or Communications

Complete at least 1 of the following courses:
- ENG132-College Writing and Research 3 credits
  OR ENG132H-Honors Coll Writing & Research 3 credits

Category 3: Mathematics

Complete any one course from the General Education Requirements for Transfer Degrees (MTA) list.

Complete at least 1 courses in the following course sets:
- CAT3 - Coll Algebra - Gen Ed Transfer - 2020
- CAT3 - Quant Lit - Gen Ed Transfer - 2025
- CAT3 Stats - Gen Ed Transfer - 2025

Category 4: Social Sciences

Complete ALL of the following Courses:
- PSY131-Introductory Psychology 3 credits
- SOC131-Introduction to Sociology 3 credits

Category 5: Humanities and Fine Arts

Complete any two courses from the General Education Requirements for Transfer Degrees (MTA) list, from different disciplines.

Complete at least 2 courses in the following course sets:
- CAT5 - Gen Ed Transfer - 2025

Category 6: Natural Sciences

Complete any two courses, from the General Education Requirements for Transfer Degrees (MTA) list, including one with laboratory experience, from different disciplines.

Complete at least 2 courses in the following course sets:
- CAT6 - Transfer - Lec and Lab - 2025
- CAT6 - Transfer - Lec Only - 2020
- CAT6 - Gen Ed Transfer - Lab Only - 2020

Category 7: General Education

Complete additional courses from the General Education Requirements for Transfer Degrees (MTA) list, if needed, to reach 30 total credits

Additional Comments:
See General Education Requirements for Transfer Degrees for details.

Degree Specific Requirements

Sports Management AA - Degree Specific Course Requirements
Type
Completion Requirement

Computer Technology

Complete at least 1 courses in the following course sets:
- Computer Technology - 2020

Additional Comments:
See Degree Specific Requirements for details.

STUDIOART.AFA - Studio Art

Program Information

Program Title
Studio Art

Program Code
STUDIOART.AFA

Degree Type
Associate in Fine Arts

Minimum Credits for Program Completion
62

Program Eligible for Financial Aid?
Yes

Subject
Art (Art History)

Semesters to Complete Program
4

Program Description
A comprehensive study of the foundation skills needed to successfully transfer to a four year Bachelor of Fine Arts program. Course work includes design studies, drawing, painting, photography, ceramics, digital media, and art history - all of which are used to develop an understanding of the visual elements and principals of design as they relate to observational, spatial, and expressive literacy. Craftsmanship, dedication and skill sets are stressed throughout the program. While visual literacy is of utmost importance within the program, learning how to look at, understand and communicate about art, both in a written and oral context, is also stressed. All students will be required to participate in an on-campus Exit Exhibition prior to graduation.

Faculty Contact
Steven Glazer

Faculty Contact Email
sglazer@hfcc.edu

Faculty Contact Phone
313-845-6485

Faculty Contact Office Location
F-140

Academic Advisor
Sarah Krizan

Academic Advisor Contact Email
smkrizan@hfcc.edu

Academic Advisor Contact Phone
313-845-9889

Academic Advisor Office Location
K-248

School
Liberal Arts

Academic Department
Fine & Performing Arts

Program Learning Outcomes

Communicate aesthetic concepts in a variety of media utilizing the Visual Elements and Principles of Design.

Create body of two-dimensional work that demonstrates an understanding of the Visual Elements and Principals of Design as they apply to observational literacy.

Create a body of three-dimensional work that demonstrates and understanding of the Visual Elements and Principles of Design as they apply to spatial literacy.

Develop a sense of historical literacy as it relates to the visual arts, and the impact on ones own art, through course assignments and discussions.

Develop a sense of expressive literacy as it relates to the creation of artistic endeavors, and assemble a body of work that validates this capability.

What Classes do I take?

2-Year Plan
Studio Art - AFA: Recommended Sequence - Current
Total Credits
62
Description
Enrollment Status: Full Time

If you have questions about the order in which you should take these courses, or the availability of these courses, please contact your advisor or the faculty contact listed below.

Program Contact Information

Office Contact: School of Liberal Arts: 313-845-9624, lainfo@hfcc.edu, Liberal Arts Building, Room: K-201 and F-138

Faculty Contact: Steven Glazer: 313-845-6485, sglazer@hfcc.edu, Fine Arts Bldg, Room: F-140

Academic Advisor: Sarah Krizan: 313-845-9889, smkrizan@hfcc.edu, Liberal Arts Bldg, Room: K-248

For students in an older version of this program, please visit Henry Ford College Catalog Archive to view required courses.

Year	Semester	Semester Credits
Year 1	Fall	15

Courses
- ART101 - Two-Dimensional Design

Semester Credits 3
Contact Hours 92

Courses
- ART102 - Drawing I

Semester Credits 3
Contact Hours 92

Courses
- ART104 - Color Theory

Semester Credits 3
Contact Hours 92

Courses
- CAT1 - Gen Ed Transfer - 2020

Semester Credits 3
Contact Hours 47

Courses
- CAT4 - Gen Ed Transfer - 2020

Semester Credits 3
Contact Hours 47

Year	Semester	Semester Credits
Year 1	Winter	15

Courses
- ART105 - Three-Dimensional Design

Semester Credits
3
Contact Hours
92

Courses
- ART111 - Digital Media

Semester Credits
3
Contact Hours
92

Courses
- ART112 - Drawing II

Semester Credits
3
Contact Hours
92

Courses
- ART121 - Art History I - Pre-Historic to Medieval

Semester Credits
3
Contact Hours
47

Courses
- CAT2 - Gen Ed Transfer - 2020

Semester Credits
3
Contact Hours
47

Year	Semester	Semester Credits
Year 2	Fall	15

Courses
- ART113 - Life Drawing I

Semester Credits
3
Contact Hours
92

Courses
- ART122 - Art History Survey II

Semester Credits
3
Contact Hours
47

Courses
- CAT5 - Gen Ed Transfer - 2025

Semester Credits
3
Contact Hours
47

Courses
- Complete Two: ART116, ART161, ART141 (Generic)
  OR
- ART116 - Painting I
  OR
- ART161 - Darkroom Photography
  OR
- ART141 - Ceramics I

Semester Credits
6
Contact Hours
94

Year	Semester	Semester Credits
Year 2	Winter	17

Courses
- ART273 - Studio Art Capstone

Semester Credits
1
Contact Hours
16

Courses
- Complete additional courses from your chosen pathway. Consultation with an academic advisor/navigator, counselor, or faculty chair recommended to determine the correct pathway. (Generic)

Semester Credits
16
Contact Hours
250

Program Requirements

Minimum Credits for Program Completion
62

Minimum GPA required for Graduation
2.000

HFC Credit Hour Residency Requirement
20

Simple Requisites

Core Course Requirements

Studio Art AFA - Core Course Requirements
Type
Completion Requirement

Complete ALL of the following Courses:
- ART101-Two Dimensional Design 3 credits
- ART102-Drawing I 3 credits
- ART104-Color Theory 3 credits
- ART105-Three Dimensional Design 3 credits
- ART111-Digital Media 3 credits
- ART112-Drawing II 3 credits
- ART113-Life Drawing I 3 credits
- ART116-Painting I 3 credits
- ART121-Art History Survey I 3 credits
- ART122-Art History Survey II 3 credits
- ART141-Ceramics I 3 credits
- ART273-Studio Art Capstone 1 credits

Support Course Requirements

Studio Art AFA - Support Course Requirements - General Transfer Pathway
Type
Completion Requirement

Photography

Complete at least 1 of the following courses:
- ART150-Digital Photography I 3 credits
  OR ART161-Darkroom Photography 3 credits

Category 3: Mathematics

Complete any one from the General Education Requirements for Transfer Degrees (MTA) list

Earn at least 4 credits from the following:
- CAT3 - Coll Algebra - Gen Ed Transfer - 2020
- CAT3 - Quant Lit - Gen Ed Transfer - 2025
- CAT3 Stats - Gen Ed Transfer - 2025

Category 4: Social Sciences

Complete any one from the General Education Requirements for Transfer Degrees (MTA) list

Complete at least 1 courses in the following course sets:
- CAT4 - Gen Ed Transfer - 2020

Category 5: Humanities and Fine Arts

Complete any one from a different discipline from the General Education Requirements for Transfer Degrees (MTA) list, (not ART).

Complete at least 1 courses in the following course sets:
- CAT5 - Gen Ed Transfer - 2025

Modern or Contemporary Art

Complete at least 1 of the following courses:
- ART123-History of Modern Art 3 credits
  OR ART229-Survey of Contemporary Art 3 credits

Studio Art Support

Complete at least 1 of the following courses:
- ART142-Ceramics II 3 credits
  OR ART150-Digital Photography I 3 credits
  OR ART161-Darkroom Photography 3 credits
  OR ART213-Life Drawing II 3 credits
  OR ART216-Painting II 3 credits
  OR ART221-Medieval Art 3 credits
  OR ART224-Art of Islam 3 credits
  OR ART225-Asian Art: India & SE Asia 3 credits
  OR ART226-African and Afro American Art 3 credits
  OR ART227-History of Arab Art & Architec 3 credits
  OR ART228-Arabic Calligraphy 3 credits
  OR ART229-Survey of Contemporary Art 3 credits
  OR
  OR ART242-Ceramics III 3 credits
  OR ART250-Digital Photography II 3 credits
  OR ART261-Darkroom Photography II 3 credits
  OR
  OR ART2936-Topics in Studio Art 3 credits

Studio Art AFA - Support Course Requirements - Wayne State University Pathway
Type
Completion Requirement

For students completing the 76 credit hour AFA Wayne State University Transfer pathway.

Complete ALL of the following Courses:
- ART123-History of Modern Art 3 credits
- ART150-Digital Photography I 3 credits

Studio Art Elective

Complete at least 1 of the following courses:
- ART142-Ceramics II 3 credits
  OR ART161-Darkroom Photography 3 credits
  OR ART213-Life Drawing II 3 credits
  OR ART216-Painting II 3 credits
  OR ART242-Ceramics III 3 credits
  OR ART250-Digital Photography II 3 credits
  OR ART261-Darkroom Photography II 3 credits

Studio Art and/or Art History Electives

Complete at least 2 of the following courses:
- ART142-Ceramics II 3 credits
  OR ART161-Darkroom Photography 3 credits
  OR ART213-Life Drawing II 3 credits
  OR ART216-Painting II 3 credits
  OR ART221-Medieval Art 3 credits
  OR ART224-Art of Islam 3 credits
  OR ART225-Asian Art: India & SE Asia 3 credits
  OR ART226-African and Afro American Art 3 credits
  OR ART227-History of Arab Art & Architec 3 credits
  OR ART228-Arabic Calligraphy 3 credits
  OR ART229-Survey of Contemporary Art 3 credits
  OR ART242-Ceramics III 3 credits
  OR ART250-Digital Photography II 3 credits
  OR ART261-Darkroom Photography II 3 credits
  OR

Category 3: Mathematics

Complete any one from the General Education Requirements for Transfer Degrees (MTA) list.

Complete at least 1 courses in the following course sets:

- CAT3 - Coll Algebra - Gen Ed Transfer - 2020
- CAT3 - Quant Lit - Gen Ed Transfer - 2025
- CAT3 Stats - Gen Ed Transfer - 2025

Category 4: Social Sciences

Complete any two from different disciplines, from the General Education Requirements for Transfer Degrees (MTA) list.

Complete at least 2 courses in the following course sets:

- CAT4 - Gen Ed Transfer - 2020

Category 5: Humanities and Fine Arts

Complete any one from a different discipline from the General Education Requirements for Transfer Degrees (MTA) list, (not ART).

Complete at least 1 courses in the following course sets:

- CAT5 - Gen Ed Transfer - 2025

Category 6: Natural Sciences

Complete any two, including one with laboratory experience, from different disciplines, from the General Education Requirements for Transfer Degrees (MTA) list.

Complete at least 2 courses in the following course sets:

- CAT6 - Transfer - Lec and Lab - 2025
- CAT6 - Transfer - Lec Only - 2020
- CAT6 - Gen Ed Transfer - Lab Only - 2020

Category 7: General Education

Complete any three (3) additional general education credits from the General Education Requirements for Transfer Degrees (MTA) list if needed.

Earn at least 3 credits from the following:

- Gen Ed - 3 hrs - 2025

Studio Art AFA - Support Course Requirements - Eastern Michigan University Pathway
Type
Completion Requirement

For students completing the 73 credit hour AFA Eastern Michigan University Transfer pathway.

Complete ALL of the following Courses:

- ART123-History of Modern Art 3 credits
- ART229-Survey of Contemporary Art 3 credits

Complete at least 1 of the following courses:

- ART150-Digital Photography I 3 credits
  OR ART161-Darkroom Photography 3 credits

Category 3: Mathematics

Complete any one from the General Education Requirements for Transfer Degrees (MTA) list.

Complete at least 1 courses in the following course sets:

- CAT3 - Coll Algebra - Gen Ed Transfer - 2020
- CAT3 - Quant Lit - Gen Ed Transfer - 2025
- CAT3 Stats - Gen Ed Transfer - 2025

Category 4: Social Sciences

Complete any two from different disciplines, from the General Education Requirements for Transfer Degrees (MTA) list.

Complete at least 2 courses in the following course sets:

- CAT4 - Gen Ed Transfer - 2020

Category 5: Humanities and Fine Arts

Complete any one from a different discipline from the General Education Requirements for Transfer Degrees (MTA) list, (not ART)

Complete at least 1 courses in the following course sets:

- CAT5 - Gen Ed Transfer - 2025

Category 6: Natural Sciences

Complete any two, including one with laboratory experience, from different disciplines, from the General Education Requirements for Transfer Degrees (MTA) list.

Complete at least 2 courses in the following course sets:

- CAT6 - Transfer - Lec and Lab - 2025
- CAT6 - Transfer - Lec Only - 2020
- CAT6 - Gen Ed Transfer - Lab Only - 2020

Category 7: General Education

Complete any three (3) additional general education credits from the General Education Requirements for Transfer Degrees (MTA) list if needed.

Earn at least 3 credits from the following:

- Gen Ed - 3 hrs - 2025

Studio Art Support

Complete at least 1 of the following courses:

- ART142-Ceramics II 3 credits
  OR ART150-Digital Photography I 3 credits
  OR ART161-Darkroom Photography 3 credits
  OR ART213-Life Drawing II 3 credits
  OR ART221-Medieval Art 3 credits
  OR ART224-Art of Islam 3 credits
  OR ART225-Asian Art: India & SE Asia 3 credits
  OR ART226-African and Afro American Art 3 credits
  OR ART227-History of Arab Art & Architec 3 credits
  OR ART228-Arabic Calligraphy 3 credits
  OR ART229-Survey of Contemporary Art 3 credits
  OR
  OR ART242-Ceramics III 3 credits
  OR ART250-Digital Photography II 3 credits
  OR ART261-Darkroom Photography II 3 credits
  OR
  OR ART2936-Topics in Studio Art 3 credits

General Education Requirements

Studio Art AFA - General Education Course Requirements
Type
Completion Requirement

Category 1: English Composition

Complete any one course from the General Education Requirements for Transfer Degrees (MTA) list.

Complete at least 1 courses in the following course sets:

- CAT1 - Gen Ed Transfer - 2020

Category 2: English Composition or Communications

Complete any one course from the General Education Requirements for Transfer Degrees (MTA) list.

Complete at least 1 courses in the following course sets:

- CAT2 - Gen Ed Transfer - 2020

Additional Comments:
See General Education Requirements for Transfer Degrees for details.

SUPERVISION.CA - Supervision

Program Information

Program Title
Supervision Certificate

Program Code
SUPERVISION.CA

Degree Type
Certificate of Achievement

Minimum Credits for Program Completion
16

Program Eligible for Financial Aid?
Yes

Subject
Management

Semesters to Complete Program
3

Program Description
Assists in developing or improving managerial/supervisory skills. Develops an understanding of basic supervisory principles that is helpful in guiding and directing employees in every type of organization. The Supervision certificate may also be used as a building block towards earning the Associate of Business degree in Management.

Faculty Contact	Faculty Contact Email	Faculty Contact Phone	Faculty Contact Office Location
Corinne Asher	casher@hfcc.edu	313-845-9867	K-325

Academic Advisor	Academic Advisor Contact Email	Academic Advisor Contact Phone	Academic Advisor Office Location
Ashlei Chears	achears@hfcc.edu	313-845-6486	E-211H

School
Business, Entrepreneurship, PD

Academic Department
Business & Economics

Program Learning Outcomes

Describe the components of financial statements.

Apply management theory to effectively supervise the human resources of an organization.

Evaluate management decisions given an organizations relationship to the external business environment.

Recognize common problems in managing an organization.

Demonstrate effective non-verbal and verbal communication skills for a business environment.

What Classes do I take?

2-Year Plan
Supervision - CA: Recommended Sequence - Current
Total Credits
16
Description
If you have questions about the order in which you should take these courses, or the availability of these courses, please contact your advisor or the faculty contact listed below.

Program Contact Information

Office Contact: School of Business, Entrepreneurship, and Professional Development: 313-845-9645, bepdinfo@hfcc.edu, Technology Bldg, Room: E-211

Faculty Contact: Corinne Asher: 313-845-9867, casher@hfcc.edu, Liberal Arts Building, Room: K-325

Academic Advisor: Ashlei Chears: 313-845-6486, achears@hfcc.edu, Technology Bldg, Room: E-211H

For students in an older version of this program, please visit Henry Ford College Catalog Archive to view required courses.

Year	Semester	Semester Credits
Year 1	Fall	10

Courses
- BBA131 - Introduction to Business

Semester Credits
4
Contact Hours
62

Courses
- BBA133 - Business Behavior and Communication

Semester Credits
3
Contact Hours
47

Courses
- MGT231 - Leadership and Teambuilding

Semester Credits
3
Contact Hours
47

Year	Semester	Semester Credits
Year 1	Winter	3

Courses
- MGT230 - Principles of Management

Semester Credits
3
Contact Hours
47

Year	Semester	Semester Credits
Year 2	Fall	3

Courses
- MGT232 (inactive) (Generic)
  OR
- MGT237 - Organizational Behavior

Semester Credits 3
Contact Hours 47

Program Requirements

Minimum Credits for Program Completion	Minimum GPA required for Graduation	HFC Credit Hour Residency Requirement
16	2.000	20

Simple Requisites

Core Course Requirements

Supervision CA - Core Course Requirements
Type
Completion Requirement

Complete ALL of the following Courses:
- BBA131-Intro to Business 4 credits
- BBA133-Bus Behavr & Comm 3 credits
- MGT230-Principles of Management 3 credits
- MGT231-Leadership and Teambuilding 3 credits

Management

Complete at least 1 of the following courses:
- **OR** MGT237-Organizational Behavior 3 credits

SURTC.AAS - Surgical Technologist

Program Information

Program Title
Surgical Technologist AAS Degree

Program Code
SURTC.AAS

Degree Type
Associate in Applied Science

Minimum Credits for Program Completion
63.5

Program Eligible for Financial Aid?
Yes

Subject
Surgical Technician

Semesters to Complete Program
5

Program Description
Prepares individuals for employment as entry-level surgical technologists. In the first year of the program, students complete the basic technical and academic support courses. The second year focuses on advanced technical courses and the clinical component of the program. There are two major clinical courses in the second year of the program. Students spend approximately 600 hours in a variety of diverse, quality clinical settings. Core courses in the program are offered only in the semester as indicated in the course sequence. This program meets the standard program guidelines for clinical case requirements.

Program Accreditation Information
The Surgical Technology Program is accredited through the Commission on Accreditation of Allied Health Education Programs (CAAHEP) upon recommendation of the Accreditation Review Council on Education in Surgical Technology and Surgical Assisting (303) 694-9262.

Commission on Accreditation of Allied Health Education Programs
9355-113th St N. #7709
Seminole, FL 33775
727-210-2350
www.caahep.org

Faculty Contact
Julie Jackson

Faculty Contact Email
jjackson131@hfcc.edu

Faculty Contact Phone
313-845-9733

Faculty Contact Office Location
G-133K

Academic Advisor
Samer Atris

Academic Advisor Contact Email
satris1@hfcc.edu

Academic Advisor Contact Phone
313-317-6862

Academic Advisor Office Location
G-203C

School
Health & Human Services

Academic Department
Health Careers, Education, and Human Services

Admissions Requirements

Admissions Requirements
Admission Requirements and Eligibility

Students who meet all admission requirements are considered qualified and are admitted to the technical part of the program once per year in the summer semester on a "first qualified, first admitted" basis. Acceptance into the college does not constitute nor guarantee admission to the technical part of the program. Final approval to enroll in the technical part of the program comes from the Surgical Technology Program Director.

Program Admission Requirements

1. College GPA of at least 2.50 or higher for a minimum of 12 academic credits, excluding lower than 100-level courses, HPE activity, studio and performance classes (if applicable).
2. Accuplacer Next Gen (250+) Reading Score or completion of ENG131 Introduction College Writing with C or higher.
3. Completion of BIO233 Anatomy and Physiology I with a C or higher.
4. Complete one of the following:
   BIO135 Microbiology for AHS with a C or higher.
   BIO251 Microbiology with C or higher.
5. Complete AH100 Medical Terminology with a C or higher.

The Program Admission Process

Our Health Career programs are limited enrollment programs with specific admission requirements. In order to get on the qualified list, you must complete the Health Careers Surgical Technologist (SRG) application found at the Health Careers Admissions Process site and complete all the SRG admission requirements. It is recommended that students interested in a health career meet with the Health Careers Student Success Navigator located in the Welcome Center Advising area. Make an appointment with the Health Careers Student Success Navigator early in your planning process. This will allow you to discuss program options and create an academic plan to qualify for the selected program.

Due to the number of credit hours required for program completion and the intensity of the program, students are encouraged to complete as many of the Required Support Courses as possible prior to entering the program. Students are encouraged to follow the recommended sequence to complete the program in an efficient time. The first courses that a student should complete are those required for program admission and Required Support Courses.

Courses Required for Program Admission
BIO135 - Microbiology for Allied Health Sciences, BIO251 - Microbiology, BIO233 - Anatomy and Physiology I, AH100 - Medical Terminology, SRG102 - Surgical Technology Introduction

Program Learning Outcomes

- Create a sterile environment and maintain sterile technique by strictly adhering to the AST Recommended Standards of Practice throughout the entire perioperative experience.
- Apply knowledge of surgical procedures to effectively utilize surgical equipment, supplies, instruments, sharps and medications used throughout the surgical procedure.
- Demonstrate competence counting all surgical supplies and instruments at each phase of the perioperative experience.
- Exhibit professional behavior and integrity by effectively communicating and collaborating with healthcare personnel, operating room team members, and patients.

What Classes do I take?

2-Year Plan
Surgical Technologist - AAS: Recommended Sequence - Current
Total Credits
63.5 - 64.5
Description
Enrollment Status: Full Time

If you have questions about the order in which you should take these courses, or the availability of these courses, please contact your advisor or the faculty contact listed below.

Program Contact Information

Office Contact: School of Health and Human Services: 313-845-9877, hhsinfo@hfcc.edu, Health Careers Education Ctr, Room: G-132

Faculty Contact: Julie Jackson: 313-845-9733,jjackson131@hfcc.edu, Health Careers Education Ctr, Room: G-133K

Academic Advisor: Samer Atris: 313-317-6862, satris1@hfcc.edu, Health Careers Bldg, Room: G-203C

For students in an older version of this program, please visit Henry Ford College Catalog Archive to view required courses.

Year	Semester	Semester Credits
Year 1	Fall	14 - 15

Courses
- AH100 - Medical Terminology

Semester Credits 4
Contact Hours 62

Courses
- BIO135 - Microbiology for Allied Health Sciences
  OR
- BIO251 - Microbiology

Semester Credits 4 - 5
Contact Hours 77 - 122

Courses
- ENG131 - Introduction to College Writing
  OR
- ENG131H - Honors Introduction to College Writing

Semester Credits 3
Contact Hours 47

Courses
- POLS131 - Intro to American Gov't & Politi Science
  OR
- SOC131 - Introduction to Sociology

Semester Credits 3
Contact Hours 47

Year	Semester	Semester Credits
Year 1	Winter	12

Courses
- BIO233 - Anatomy and Physiology I

Semester Credits 4
Contact Hours 77

Courses
- HCS131 - Computers in Health Care

Semester Credits 3
Contact Hours 47

Courses
- SRG102 - Surgical Technology Introduction

Semester Credits 2
Contact Hours 32

Courses
- CAT3 - Gen Ed Applied - 2025

Semester Credits 3
Contact Hours 47

Year	Semester	Semester Credits
Year 1	Summer	7.5

Courses
- BIO234 - Anatomy and Physiology II

Semester Credits 4
Contact Hours 77

Courses
- SRG104 - Fundamentals of Surgical Technology

Semester Credits 2
Contact Hours 32

Courses
- SRG106 - Fundamentals of Surgical Technology Lab

Semester Credits 1.5
Contact Hours 23.5

Year	Semester	Semester Credits
Year 2	Fall	14

Courses
- SRG120 - Surgical Procedures I

Semester Credits 4
Contact Hours 62

Courses
- SRG140 - Surgical Techniques I

Semester Credits 2
Contact Hours 32

Courses
- SRG160 - Surgical Pharmacology

Semester Credits 3
Contact Hours 47

Courses
- SRG209 - Surgical Externship I

Semester Credits 5
Contact Hours 77

Year	Semester	Semester Credits
Year 2	Winter	16

Courses
- SRG220 - Surgical Procedures II

Semester Credits
4
Contact Hours
62

Courses
- SRG240 - Issues in Surgical Technology

Semester Credits
4
Contact Hours
62

Courses
- SRG290 - Clinical Externship II

Semester Credits
8
Contact Hours
360

2-Year Plan
Surgical Technologist - AAS: Recommended Sequence 2022-2023
Total Credits
64
Description
Enrollment Status: Full Time

If you have questions about the order in which you should take these courses, or the availability of these courses, please contact your advisor or the faculty contact listed below.

Program Contact Information

Office Contact: School of Health and Human Services: 313-845-9877, hhsinfo@hfcc.edu, Health Careers Education Ctr, Room: G-132

Faculty Contact: Julie Jackson: 313-845-9733, jjackson131@hfcc.edu, Health Careers Education Ctr, Room: G-133K

Academic Advisor: Samer Atris: 313-317-6862, satris1@hfcc.edu, Health Careers Bldg, Room: G-203C

For students in an older version of this program, please visit Henry Ford College Catalog Archive to view required courses.

Year	Semester	Semester Credits
Year 1	Winter	8

Courses
- BIO233 - Anatomy and Physiology I

Semester Credits
4
Contact Hours
77

Courses
- BIO135 - Microbiology for Allied Health Sciences
  OR
- BIO251 - Microbiology

Semester Credits
4
Contact Hours
77

Year	Semester	Semester Credits
Year 2	Fall	13

Courses
- AH100 - Medical Terminology

Semester Credits
4
Contact Hours
62

Courses
- BIO234 - Anatomy and Physiology II

Semester Credits
4
Contact Hours
77

Courses
- SRG101 - Introduction to Surgical Technology

Semester Credits
4
Contact Hours
62

Courses
- SRG105 - Introduction to Surgical Technology Lab

Semester Credits
1
Contact Hours
16

Year	Semester	Semester Credits
Year 2	Winter	15

Courses
- ENG131 - Introduction to College Writing

Semester Credits
3
Contact Hours
47

Courses
- SRG120 - Surgical Procedures I

Semester Credits 4
Contact Hours 62

Courses
- SRG140 - Surgical Techniques I

Semester Credits 2
Contact Hours 32

Courses
- SRG160 - Surgical Pharmacology

Semester Credits 3
Contact Hours 47

Courses
- POLS131 - Intro to American Gov't & Politi Science
  OR
- SOC131 - Introduction to Sociology

Semester Credits 3
Contact Hours 47

Year	Semester	Semester Credits
Year 2	Summer	4

Courses
- SRG152 - Advanced Surgical Techniques

Semester Credits 1
Contact Hours 16

Courses
- HCS131 - Computers in Health Care

Semester Credits 3
Contact Hours 47

Year	Semester	Semester Credits
Year 3	Fall	12

Courses
- SRG209 - Surgical Externship I

Semester Credits 5
Contact Hours 77

Courses
- SRG220 - Surgical Procedures II

Semester Credits 4
Contact Hours 62

Courses
- CAT3 - Gen Ed Applied - 2025

Semester Credits 3
Contact Hours 47

Year	Semester	Semester Credits
Year 3	Winter	12

Courses
- SRG240 - Issues in Surgical Technology

Semester Credits 4
Contact Hours 62

Courses
- SRG290 - Clinical Externship II

Semester Credits 8
Contact Hours 124

Program Requirements

Minimum Credits for Program Completion
63.50
Minimum GPA required for Graduation
2.000
HFC Credit Hour Residency Requirement
20

Simple Requisites

Core Course Requirements

Surgical Technologist AAS - Core Course Requirements
Type
Completion Requirement

All courses in the SRG program must be successfully completed within three consecutive calendar years. A minimum of a C grade (C- is not acceptable) is required in all courses for successful completion of the SRG program.

Complete ALL of the following Courses:
- SRG120-Surgical Procedures I 4 credits
- SRG140-Surgical Techniques I 2 credits
- SRG160-Surgical Pharmacology 3 credits
- SRG209-Surgical Externship I 5 credits
- SRG220-Surgical Procedures II 4 credits
- SRG240-Issues in Surgical Technology 4 credits
- SRG290-Clinical Externship II 8 credits
- SRG104-Fund. of Surgical Technology 2 credits
- SRG106-Fund. of Surgical Tech Lab 1.5 credits

Support Course Requirements

Surgical Technologist AAS - Support Course Requirements
Type
Completion Requirement

Complete ALL of the following Courses:
- BIO234-Anatomy and Physiology II 4 credits

- ENG131-Introduction College Writing 3 credits
- HCS131-Computers in Health Care 3 credits

Category 4: Social Sciences

Complete at least 1 of the following courses:

- POLS131-Intro Amer Gov't & Pol Sci 3 credits
  OR SOC131-Introduction to Sociology 3 credits

Category 3: Mathematics

Complete at least 1 of the following courses:

- MATH100-Basic Tech Mathematics 4 credits
  OR MATH101-Math for Health Career 4 credits
  OR
  OR MATH110-Intermediate Algebra 4 credits
  OR MATH115-College Algebra 5 credits
  OR
  OR MATH131-Math for the Modern World 4 credits
  OR MATH141-Introduction to Statistics 4 credits
  OR
  OR
  OR MATH175-Precalculus 5 credits
  OR MATH180-Calculus 1 5 credits
  OR MATH183-Calculus II 5 credits

Additional Comments:
See General Education Requirements for Applied Degrees for details.

SWDEV.CA - Software Developer

Program Information

Program Title
Software Developer

Program Code
SWDEV.CA

Degree Type
Certificate of Achievement

Minimum Credits for Program Completion
21

Program Eligible for Financial Aid?
Yes

Subject
Computer Information Systems

Program Description
Prepares students for an entry-level position as a software developer. Students develop a marketable skill-set in designing, programming, and testing software, including windows, web, mobile, database and cross-platform applications. A strong foundation in the most marketable languages (e.g., Python, SQL, C, C++, C#, JavaScript, HTML, CSS, Java, Swift) and technologies is provided along with important accompanying knowledge and skills, such as the use of A.I. in development, team development and review, software quality analysis and version control. This certificate is a stackable credential within our Software Engineering Associate's degree and Computer Science Associate's degree. Software development is consistently ranked as the among the best careers in the country, e.g., #1 in 2023 and #3 in 2024 according to U.S. News and World Report "Best Jobs" report.

Faculty Contact
David Maier

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Faculty Contact Phone
313-845-9890

Faculty Contact Office Location
E-112

Academic Advisor
DeJanae Hayes

Academic Advisor Contact Email
dhayes8@hfcc.edu

Academic Advisor Contact Phone
313-845-9792

Academic Advisor Office Location
E-211C

School
Business, Entrepreneurship, PD

Academic Department
Computer Technology

Program Learning Outcomes

Design and develop software programs using structured and object-oriented programming.

Develop web sites using both client and server side languages.

Design and develop software applications for a variety of platforms, e.g., web, windows, mobile.

Design and develop relational database and database applications.

Demonstrate proficiency with all phases of the software development life cycle.

What Classes do I take?

2-Year Plan
Software Developer CA - Recommended Sequence 2025-2026
Total Credits
21
Description
Enrollment Status: Full Time

If you have questions about the order in which you should take these courses, or the availability of these courses, please contact your advisor or the faculty contact listed below.

Program Contact Information

Office Contact: School of Business, Entrepreneurship, and Professional Development: 313-845-9645, bepdinfo@hfcc.edu, Technology Bldg, Room: E-211

Faculty Contact: David Maier: 313-845-9890, djmaier@hfcc.edu, Technology Bldg, Room: E-112

Academic Advisor: DeJanae Hayes: 313-845-9792, dhayes8@hfcc.edu, Technology Bldg, Room: E-211C

Year	Semester	Semester Credits
Year 1	Fall	9

Courses
- CIS122 - Web Internet Technologies

Semester Credits 3
Contact Hours 62

Courses
- CIS125 - Principles of Programming Logic

Semester Credits 4
Contact Hours 62

Courses
- Complete one of two concentration courses (Generic)

Semester Credits 2
Contact Hours 32

Year	Semester	Semester Credits
Year 1	Winter	12

Courses
- CIS111 - SQL for Database Development

Semester Credits 3
Contact Hours 62

Courses
- CIS170 - C Programming

Semester Credits 3
Contact Hours 62

Courses
- CIS130 - C# Programming

Semester Credits
3
Contact Hours
62

Courses
- Complete one of two concentration courses (Generic)

Semester Credits
3
Contact Hours
47

Program Requirements

Minimum Credits for Program Completion
21

Minimum GPA required for Graduation
2.000

HFC Credit Hour Residency Requirement
20

Simple Requisites

Core Course Requirements

Software Developer CA - Core Course Requirements
Type
Completion Requirement

Complete ALL of the following Courses:
- CIS111-SQL for Database Development 3 credits
- CIS122-Web Internet Technologies 3 credits
- CIS125-Prin of Programming Logic 4 credits
- CIS130-C# Programming 3 credits
- CIS170-C Programming 3 credits

Concentration

Complete at least 2 of the following courses:
- CIS126-HTML/CSS Web Programming 4 credits
  OR CIS141-Intro to Mobile App Developmen 2 credits
  OR CIS171-Java Programming 3 credits
  OR CIS172-JavaScript 3 credits
  OR CIS222-Web Database Dev with PHP 4 credits
  OR CIS225-Web Frameworks 3 credits
  OR CIS230-C++ Programming 3 credits
  OR CIS241-Adv Mobile App Dev (Android) 3 credits
  OR CIS243-Advanced Mobile App Dev (iOS) 3 credits
  OR CIS271-Advanced Java 4 credits

TDIMAK.TA.CA - Tool and Die Maker

Program Information

Program Title
Tool & Die Maker

Program Code
TDIMAK.TA.CA

Degree Type
Certificate of Achievement

Subject
Skilled Trade & Apprenticeship

Program Description
Provides students with the opportunity to analyze specifications, lay out metal stock, set up and operate machine tools, and fit and assemble parts to make and repair dies, cutting tools, jigs, fixtures, gauges, and machinists' hand tools.

Faculty Contact
Richard Cieslak

Faculty Contact Email
rfcieslak@hfcc.edu

Faculty Contact Phone
313-845-9645

Faculty Contact Office Location
E-164

Academic Advisor
Rachel VanZutphen

Academic Advisor Contact Email
rvanzutphen@hfcc.edu

Academic Advisor Contact Phone
313-845-9873

Academic Advisor Office Location
E-211L

School
Business, Entrepreneurship, PD

Academic Department
Skilled Trade & Apprenticeship

Admissions Requirements

Admissions Requirements
Additional Program Requirements

Complete a minimum of 38 additional credit hours in courses required within your specialization.

Program Learning Outcomes

Identify proper equipment needed to construct or repair tools or dies

Perform machine operations safely

Differentiate between common tool and die components

What Classes do I take?

2-Year Plan
See TAE Office for related RTI
Total Credits
0

Program Requirements

Minimum Credits for Program Completion
10

Minimum GPA required for Graduation
2.000

HFC Credit Hour Residency Requirement
20

Simple Requisites

Core Course Requirements

Tool & Die Maker CA - Core Course Requirements
Type
Completion Requirement

Complete ALL of the following Courses:
- TAMA110-Industrial Appl of Basic Math 2 credits
- TAMA120-Indust Appl of Algebraic Princ 3 credits
- TAMA130-Indust Appl Geometric Prin 2 credits
- TAMA200-Indust Appl Trigonomic Princip 3 credits

Drafting or Trade and Apprentice Graphic Design: Complete courses based on specific company RTI

Enroll in the following Courses:
- DRAF110-Intro Industrial Drafting 3 credits
- DRAF120-Intro to CAD 4 credits
- DRAF130-Technical Descriptive Geometr 3 credits
- DRAF142-Industrial Detail 4 credits
- DRAF210-Die Design 3 credits
- DRAF230-Jigs, Fixtures, and Tools 3 credits

Required Foundations: Complete one (1) course based on specific company RTI

Enroll in the following Courses:
- TAFD120-Industrial Safety Awareness 2 credits
- TAFD150-Applied Technology 3 credits

Foundations Electives: Complete courses based on specific company RTI

Enroll in the following Courses:
- TAFD130-Indust App of Phys Science 3 credits

Graphic Design: Complete courses based on specific company RTI

Enroll in the following Courses:
- TAGD110-Basic Shape & Size Interpret 3 credits
- TAGD120-Advanced Graphic Interpretatio 3 credits
- TAGD130-Assembly Detailing 2 credits
- TAGD140-Comp Angles & Adv Projection 3 credits
- TAGD150-Tool, Jig, and Fixture Design 2 credits

Graphic Design Electives: Complete courses based on specific company RTI

Enroll in the following Courses:
- TAGD155-Gage, Cam Layout, and Fixture 2 credits
- TAGD160-Press Working Fundamentals 2 credits
- TAGD165-Cutting and Forming Dies 3 credits
- TAGD171-Desc Geometry: Lines & Planes 2 credits

Shop/Craft Theory: Complete courses based on specific company RTI

Enroll in the following Courses:
- MTT105-Print Rdg for Manufacturing 3 credits

- MTT110-Machine Tool Processes II 4 credits
- MTT140-Introduction to CNC 3 credits
- MTT146-Introd to Machine Tool Probing 1 credits
- MTT147-Basic Macro Programmi for CNC 1 credits
- MTT160-Comp Assisted N/C Programming 3 credits

Welding/Metallurgy: Complete courses based on specific company RTI

Enroll in the following Courses:

Additional Comments:
RTI (Related Training Instruction)

Employer specific document that details HFC courses needed to meet employer knowledge and skill requirements and fulfills HFC degree or certificate requirements.

Tool and Die Maker - Standard Die (S01)
Type
Completion Requirement

Mathematics

Credit Hours: 10

Complete ALL of the following Courses:
- TAMA110-Industrial Appl of Basic Math 2 credits
- TAMA120-Indust Appl of Algebraic Princ 3 credits
- TAMA130-Indust Appl Geometric Prin 2 credits
- TAMA200-Indust Appl Trigonomic Princip 3 credits

Drafting

Credit Hours: 20

Complete ALL of the following Courses:
- TAGD110-Basic Shape & Size Interpret 3 credits
- TAGD120-Advanced Graphic Interpretatio 3 credits
- TAGD130-Assembly Detailing 2 credits
- TAGD140-Comp Angles & Adv Projection 3 credits
- TAGD150-Tool, Jig, and Fixture Design 2 credits
- TAGD155-Gage, Cam Layout, and Fixture 2 credits
- TAGD160-Press Working Fundamentals 2 credits
- TAGD165-Cutting and Forming Dies 3 credits

Shop Theory

Credit Hours: 11

Complete ALL of the following Courses:
- MTT100-Machine Tool Processes I 4 credits
- MTT110-Machine Tool Processes II 4 credits
- MTT140-Introduction to CNC 3 credits

Metallurgy

Credit Hours: 2

Complete ALL of the following Courses:
- WELD140-Weld Metallurgy (Ferrous Meta 1 credits
- WELD141-Weld Metallurgy (Non-Ferrous 1 credits

Foundations

Credit Hours: 2

Complete ALL of the following Courses:
- TAFD120-Industrial Safety Awareness 2 credits

Additional Comments:

TOOL & DIE MAKER	
Related Program: Tool & Die Maker	**Related Apprenticeship Program:**
Employer Code: S01	**Employer Name**: Standard Die
RAPIDS:	**MARC:**
DOL Approved:	**Apprenticeship Code**:
CIP Code: 48.0507	**Minimum Total Credit Hours**: 45

THEATRE.AA - Theatre

Program Information

Program Title
Theatre AA Degree

Program Code
THEATRE.AA

Degree Type
Associate in Arts

Minimum Credits for Program Completion
60

Program Eligible for Financial Aid?
Yes

Subject
Theater

Semesters to Complete Program
4

Program Description
Provides a sound basis for understanding the theory and practice of acting, directing, or technical aspects of the theatrical arts. Offers experiences designed to prepare successful students for acceptance into acting and technical theatre schools in the United States and abroad. Within the 60 credit degree program, one nine-credit emphasis from among acting, directing, or technical theatre is chosen by the student.

Faculty Contact
John Sefel

Faculty Contact Email
jsefel@hfcc.edu

Faculty Contact Phone
313-845-6478

Faculty Contact Office Location
F-127

Academic Advisor
Sarah Krizan

Academic Advisor Contact Email
smkrizan@hfcc.edu

Academic Advisor Contact Phone
313-845-9889

Academic Advisor Office Location
K-248

School
Liberal Arts

Academic Department
Fine & Performing Arts

Program Learning Outcomes

Write research papers and reviews using writing skills and research methods in the field of theatre arts.

Evaluate theatre productions using standardized criteria.

Describe the historical context of theatre, including how it relates to contemporary society and culture.

Perform, direct, manage, or design a theatrical production.

Work collaboratively to produce a theatrical production.

Demonstrate the correct use of the specialized vocabulary within the theatrical arts.

Apply time management skills to accomplish theatrical production tasks.

What Classes do I take?

2-Year Plan
Theatre - AA: Recommended Sequence - Current
Total Credits
60
Description
Enrollment Status: Full Time

If you have questions about the order in which you should take these courses, or the availability of these courses, please contact your advisor or the faculty contact listed below.

Program Contact Information

Office Contact: School of Liberal Arts: 313-845-9624, lainfo@hfcc.edu, Liberal Arts Building, Room: K-201 and F-138

Faculty Contact: John Sefel: 313-845-6478, jsefel@hfcc.edu, Fine Arts Bldg, Room: F-127

Academic Advisor: Sarah Krizan: 313-845-9889, smkrizan@hfcc.edu, Liberal Arts Bldg, Room: K-248

For students in an older version of this program, please visit Henry Ford College Catalog Archive to view required courses.

Year	Semester	Semester Credits
Year 1	Fall	15

Courses
- THEA131 - Theatre Appreciation

Semester Credits 3
Contact Hours 47

Courses
- THEA132 - Acting I

Semester Credits 3
Contact Hours 47

Courses
- THEA135 - Introduction to Stage Makeup
  OR
- THEA138 - Stage Costuming
  OR
- THEA149 - Children's Theatre Production
  OR
- THEA235 - Topics in Theatre
  OR
- THEA255 - Lighting

Semester Credits 3
Contact Hours 47

Courses
- CAT1 - Gen Ed Transfer - 2020

Semester Credits 3
Contact Hours 47

Courses
- CAT4 - Gen Ed Transfer - 2020

Semester Credits
3
Contact Hours
47

Year	Semester	Semester Credits
Year 1	Winter	16

Courses
- THEA232 - Acting II

Semester Credits
3
Contact Hours
47

Courses
- CAT3 - Coll Algebra - Gen Ed Transfer - 2020
  OR
- CAT3 - Quant Lit - Gen Ed Transfer - 2025
  OR
- CAT3 Stats - Gen Ed Transfer - 2025

Semester Credits
4
Contact Hours
62

Courses
- CAT4 - Gen Ed Transfer - 2020

Semester Credits
3
Contact Hours
47

Courses
- Computer Technology - 2020

Semester Credits
3
Contact Hours
47

Courses
- THEA135 - Introduction to Stage Makeup
  OR
- THEA138 - Stage Costuming
  OR
- THEA149 - Children's Theatre Production
  OR
- THEA235 - Topics in Theatre
  OR
- THEA255 - Lighting

Semester Credits
3
Contact Hours
47

Year	Semester	Semester Credits
Year 2	Fall	15

Courses
- THEA238 - Theatre History

Semester Credits
3
Contact Hours
47

Courses
- THEA256 - Directing

Semester Credits
3
Contact Hours
47

Courses
- CAT6 - Transfer - Lec and Lab - 2025
  OR
- CAT6 - Transfer - Lec Only - 2020
  OR
- CAT6 - Gen Ed Transfer - Lab Only - 2020

Semester Credits
4
Contact Hours
62

Courses
- THEA260 - Acting III

Semester Credits
3
Contact Hours
47

Courses
- THEA1901 - Theatre Experience I
  OR
- THEA1902 - Theatre Experience II
  OR
- THEA1903 - Theatre Experience III

Semester Credits
1
Contact Hours
15

Courses
- Electives: Complete additional 100-level, or higher, credits to complete this degree. (Generic)

Semester Credits 1
Contact Hours 15

Year	Semester	Semester Credits
Year 2	Winter	14

Courses
- THEA135 - Introduction to Stage Makeup
  OR
- THEA138 - Stage Costuming
  OR
- THEA149 - Children's Theatre Production
  OR
- THEA235 - Topics in Theatre
  OR
- THEA255 - Lighting

Semester Credits 3
Contact Hours 47

Courses
- CAT2 - Gen Ed Transfer - 2020

Semester Credits 3
Contact Hours 47

Courses
- CAT5 - Gen Ed Transfer - 2025

Semester Credits 3
Contact Hours 47

Courses
- CAT6 - Transfer - Lec and Lab - 2025
  OR
- CAT6 - Transfer - Lec Only - 2020
  OR
- CAT6 - Gen Ed Transfer - Lab Only - 2020

Semester Credits 4
Contact Hours 62

Courses
- THEA1901 - Theatre Experience I
  OR
- THEA1902 - Theatre Experience II
  OR
- THEA1903 - Theatre Experience III

Semester Credits 1
Contact Hours 15

Program Requirements

Minimum Credits for Program Completion
60

Minimum GPA required for Graduation
2.000

HFC Credit Hour Residency Requirement
20

Simple Requisites

Core Course Requirements

Theatre AA - Core Course Requirements
Type
Completion Requirement

Complete ALL of the following Courses:
- THEA131-Theatre Appreciation 3 credits
- THEA132-Acting I 3 credits
- THEA232-Acting II 3 credits
- THEA238-Theatre History 3 credits
- THEA256-Directing 3 credits
- THEA260-Acting III 3 credits

Theater Experience

Complete at least 2 of the following courses:
- THEA1901-Theatre Experience I 1 credits
  OR THEA1902-Theatre Experience II 1 credits
  OR THEA1903-Theatre Experience III 1 credits
  OR
  OR
  OR

Support Course Requirements

Theatre AA - Support Course Requirements
Type
Completion Requirement

Theatre Specialization

Earn at least 9 credits from the following:
- THEA135-Intro to Stage Makeup 3 credits
  OR THEA138-Stage Costuming 3 credits
  OR
  OR
  OR THEA149-Children's Theatre Production 3 credits
  OR THEA235-Topics in Theatre 3 credits
  OR THEA255-Lighting 3 credits
  OR
  OR
  OR
  OR
  OR

Electives

Complete additional 100-level, or higher, credits to complete this degree.

Earn at least 1 credits

General Education Requirements

Theatre AA - General Education Course Requirements
Type
Completion Requirement

Category 1: English Composition

Complete any one from the General Education Requirements for Transfer Degrees (MTA) list.

Complete at least 1 courses in the following course sets:
- CAT1 - Gen Ed Transfer - 2020

Category 2: English Composition or Communications

Complete any one course from the General Education Requirements for Transfer Degrees (MTA) list.

Complete at least 1 courses in the following course sets:
- CAT2 - Gen Ed Transfer - 2020

Category 3: Mathematics

Complete any one course from the General Education Requirements for Transfer Degrees (MTA) list.

Complete at least 1 courses in the following course sets:
- CAT3 - Coll Algebra - Gen Ed Transfer - 2020
- CAT3 - Quant Lit - Gen Ed Transfer - 2025
- CAT3 Stats - Gen Ed Transfer - 2025

Category 4: Social Sciences

Complete any two, from different disciplines from the General Education Requirements for Transfer Degrees (MTA) list.

Complete at least 2 courses in the following course sets:
- CAT4 - Gen Ed Transfer - 2020

Category 5: Humanities and Fine Arts

Complete any one, from a different discipline (other than THEA) from the General Education Requirements for Transfer Degrees (MTA) list.

Complete at least 1 courses in the following course sets:
- CAT5 - Gen Ed Transfer - 2025

Category 6: Natural Sciences

Complete any two, including one with laboratory experience, from different disciplines from the General Education Requirements for Transfer Degrees (MTA) list.

Complete at least 2 courses in the following course sets:
- CAT6 - Transfer - Lec and Lab - 2025
- CAT6 - Transfer - Lec Only - 2020
- CAT6 - Gen Ed Transfer - Lab Only - 2020

Additional Comments:
See General Education Requirements for Transfer Degrees for details.

Degree Specific Requirements

Theatre AA - Degree Specific Course Requirements
Type
Completion Requirement

Computer Technology

Complete at least 1 courses in the following course sets:
- Computer Technology - 2020

Additional Comments:
See Degree Specific Requirements for details.

TOOLMA.TA.CA - Tool Maker

Program Information

Program Title
Tool Maker

Program Code
TOOLMA.TA.CA

Degree Type
Certificate of Achievement

Program Eligible for Financial Aid?
Yes

Subject
Skilled Trade & Apprenticeship

Program Description
Provides students with experience on the production and maintenance of precision tools commonly used in the production of metal, plastic, and other materials of all shapes and sizes. Toolmakers must interpret drawings and technical data to create various parts for manufacturing.

Faculty Contact
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Faculty Contact Phone
313-845-9645

Faculty Contact Office Location
E-164

Academic Advisor
Rachel VanZutphen

Academic Advisor Contact Email
rvanzutphen@hfcc.edu

Academic Advisor Contact Phone
313-845-9873

Academic Advisor Office Location
E-211L

School
Business, Entrepreneurship, PD

Academic Department
Skilled Trade & Apprenticeship

Admissions Requirements

Admissions Requirements
Additional Program Requirements

Complete a minimum of 38 credits and all required courses in your specialization.

Program Learning Outcomes

- Accurately measure and perform calculations.
- Interpret engineering drawings to plan the production of a given part or product in accordance with manufacturers specifications.
- Operate a range of milling and boring machinery, lathes, and CNC equipment in the manufacture of parts and products based on the drawings specified.
- Accurately assemble manufactured parts and finished components.
- Use hand and power tools.
- Test finished products for accuracy in accordance with specified drawings.
- Implement health and safety practices in the workplace.
- Operate manufacturing machinery and measuring equipment.

What Classes do I take?

2-Year Plan
See TAE Office for related program sequence
Total Credits
0

Program Requirements

Minimum Credits for Program Completion
41

Minimum GPA required for Graduation
2.000

HFC Credit Hour Residency Requirement
20

Simple Requisites

Core Course Requirements

Tool Maker CA - Core Course Requirements
Type
Completion Requirement

Industrial Technology: Complete 38 credits from:

- Architecture/Construction Trades (ACT)
- Automotive (AUTO)
- Center for Innovative Manufacturing: Electricity/Electronics (CIMEL), Hydraulics/Pneumatics (CIMHP), Manufacturing Machine Tool (CIMMT), Manufacturing Drafting/CAD (CIMPR), Trade & Apprenticeship (CIMTA), Welding (CIMWD)
- Industrial Drafting (DRAF)
- Electrical/Electronics (ELEC)
- Energy Technology (ENT)
- Engineering Technology (ENGT)
- Maintenance Trades (MFMT)
- Machine Tool Technology (MTT)
- Plumbing and Pipefitting (PLMB)
- Power Engineering and Facilities Tech. (PEFT)
- Renewable Energy (REEN)

- Trade and Apprentice Education: Electrical (TAEL), Foundation (TAFD), Fluid Power (TAFP), Graphic Design (TAGD), Industrial Materials (TAIM), Journey Person (TAJP), Mathematics (TAMA), Material Joining (TAMJ), Manufacturing (TAMN), Developmental (TADV), Maintenance Technology (TAMT), Process Instrumentation (TAPI), Plumbing/Pipefitting (TAPP), Process Tech. Practices (TAPT), Sheet Metal (TASM)

Earn at least 38 credits

Complete ALL of the following Courses:

- TAFD117-Industrial Computer Applicatio 3 credits

WEBDEV.CA - Computer Information Systems - Web Development

Program Information

Program Title
Computer Info Systems - Web Development Certificate

Program Code
WEBDEV.CA

Degree Type
Certificate of Achievement

Minimum Credits for Program Completion
24

Program Eligible for Financial Aid?
Yes

Subject
Computer Information Systems

Semesters to Complete Program
2

Program Description
Prepare graduates for an entry-level position as a Web Developer, Webmaster, Web Administrator, Web Programmer or Multimedia Developer. The Web Development Certificate distinguished itself with extensive hands-on laboratory experience using the latest technology and software. Industry-experienced, full-time faculty provide the highest quality instruction on the latest web authoring integrated development environments, graphics and design techniques, client and server-side coding and scripting, back-end technologies, multimedia and animation tools, and project management principles.

Faculty Contact
David Maier

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Faculty Contact Office Location
E-112

Academic Advisor
DeJanae Hayes

Academic Advisor Contact Email
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Academic Advisor Contact Phone
313-845-9792

Academic Advisor Office Location
E-211C

School
Business, Entrepreneurship, PD

Academic Department
Computer Technology

Program Learning Outcomes

Explain the client - server model of web development and develop client and server - side web pages.

Implement JavaScript to provide dynamic, client - side services.

Develop and publish a web site utilizing web authoring and content management software.

What Classes do I take?

2-Year Plan
Computer Information Systems: Web Development - CA: Recommended Sequence - Current
Total Credits
24
Description
Enrollment Status: Full Time

If you have questions about the order in which you should take these courses, or the availability of these courses, please contact your advisor or the faculty contact listed below.

Program Contact Information

Office Contact: School of Business, Entrepreneurship, and Professional Development: 313-845-9645, bepdinfo@hfcc.edu, Technology Bldg, Room: E-211

Faculty Contact: David Maier: 313-845-9890, djmaier@hfcc.edu, Technology Bldg, Room: E-112

Academic Advisor: DeJanae Hayes: 313-845-9792, dhayes8@hfcc.edu, Technology Bldg, Room: E-211C

For students in an older version of this program, please visit Henry Ford College Catalog Archive to view required courses.

Year	Semester	Semester Credits
Year 1	Fall	10

Courses
- ART107 - Photoshop

Semester Credits 3
Contact Hours 47

Courses
- CIS122 - Web Internet Technologies

Semester Credits 3
Contact Hours 62

Courses
- CIS126 - HTML/CSS Web Programming

Semester Credits 4
Contact Hours 62

Year	Semester	Semester Credits
Year 1	Winter	14

Courses
- CIS222 - Web Database Development with PHP

Semester Credits 4
Contact Hours 62

Courses
- CIS227 - Content Management Systems

Semester Credits 4
Contact Hours 62

Courses
- ART108 - Introduction to Animation

Semester Credits 3
Contact Hours 47

Courses
- CIS172 - JavaScript

Program Requirements

Minimum Credits for Program Completion	Minimum GPA required for Graduation	HFC Credit Hour Residency Requirement
24	2.000	20

Semester Credits	Contact Hours
Simple	3
	62

Core Course Requirements

Computer Info Systems - Web Development CA - Core Course Requirements
Type
Completion Requirement

Complete ALL of the following Courses:
- ART107-Photoshop 3 credits
- ART108-Introduction to Animation 3 credits
- CIS122-Web Internet Technologies 3 credits
- CIS126-HTML/CSS Web Programming 4 credits
- CIS172-JavaScript 3 credits
- CIS222-Web Database Dev with PHP 4 credits
- CIS227-Content Management Systems 4 credits

All Courses

ACT190 - Co-op in Architecture Construction Tech

Overview

Subject
Architecture/Construction Tech

Academic Department
Building Sciences

School
Business, Entrepreneurshp, PD

Course Description
Cooperative education is a structured method of combining classroom-based education with practical work experience. A cooperative education experience, commonly known as a "co-op," provides academic credit for structured employment experience. Work experience must be directly related to the student's declared major to be eligible.To register for this course, a student must have completed 50% of core coursework, maintain an overall GPA of 2.0 and a program specific GPA of 2.5.

Course Pre-requisite(s)
Career Services Officer or Co-op Job Developer Permission

Credit Hours
1

Total Contact Hours

Total Instructor Contact Hours:
3

Total Student Contact Hours:
75

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
Student will submit a formal request in writing to the faculty and Associate Dean for work experience to be considered for Credit for Prior College-Level Learning.

The student will complete an interview, a reflective paper, or a presentation to the faculty in which the student develops and describes the learning objectives supported by the work experience, how those learning objectives were achieved and how that learning was put into practice.

Finally, the student must also provide a portfolio (or something comparable) that shows the work completed and provide some form of documentation confirming the work experience (a resume does not suffice) for which Credit for Prior College-Level Learning is requested.

Goals, Topics, and Objectives

Course Goals
Cooperative education helps students make the school-to-work transition, develop career and program-related learning objectives, and work on applicable skills for employment. Placements should provide students with the opportunity to apply and expand upon knowledge learned in the classroom, and develop the skills acquired in their coursework to align with the standards and expectations set by the worksite.

Core Course Topics

1. Core Career-Focused Topics:

   A. Professional Dress and Demeanor (i.e. attitude, posture, courteousness)
   B. Workplace Communication
   C. Interviewing Skills
   D. Resume Building
   E. Networking and Social Media
   F. Seeking Employment
   G. Career Advancement

Program Specific: 1-3 program specific learning objectives will be developed by the instructor for each individual offering.
Student-defined: Students will create 1-3 learning objectives per credit to be approved by instructor for each individual offering.
Career Services-defined: Build a resume that meets standards of Career Services Officer.
Career Services-defined: Articulate the reasons for professional attire.
Career Services-defined: Wear professional attire while on the worksite.
Career Services-defined: Attend career workshop in professional dress.
Career Services-defined: Display appropriate professional attitude and demeanor while on the worksite.
Career Services-defined: Interview effectively.
Career Services-defined: Attend mock interview, give appropriate answers to five 5 questions
Career Services-defined: Complete a written job application in a prompt, professional manner with all information legible, error-free, and thorough.
Career Services-defined: Display understanding of the appropriate use of Social Media sites (Facebook, LinkedIn, and Twitter) during Career Services workshop.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment will be determined by the instructor based on what is in the best interest of the student's academic growth, including future employability of the student. Assessment may include, but isn't limited to:

- Major final project
- Weekly journal
- Creation and attainment of all learning objectives
- Participation in a career-focused workshop
- Consistent and prompt attendance at worksite
- Employer evaluation

General Course Requirements and Recommendations
To be determined by the instructor. Detailed course syllabi will be standardized for all co-op courses and individual course requirements will be available to the AEC and College Council by request "For information only" for each term that the course is offered.

Texts
None

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for ACT 190

ACT290 - Co-op in Architecture Construction Tech

Overview

Subject
Architecture/Construction Tech

Academic Department
Building Sciences

School
Business, Entrepreneurshp, PD

Course Description
Co-op in Architecture Construction Technology: Cooperative education is a structured method of combining classroom-based education with practical work experience. A cooperative education experience, commonly known as a "co-op," provides academic credit for structured employment experience. Work experience must be directly related to the student's declared major to be eligible.To register for this course, a student must have completed 50% of core coursework, maintain an overall GPA of 2.0 and a program specific GPA of 2.5.

Course Pre-requisite(s)
Permission from Career Services Officer or Job Developer in the Office of Career Services

Credit Hours
2

Total Contact Hours

Total Instructor Contact Hours:
3

Total Student Contact Hours:
150

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
Student will submit a formal request in writing to the faculty and Associate Dean for work experience to be considered for Credit for Prior College-Level Learning.

The student will complete an interview, a reflective paper, or a presentation to the faculty in which the student develops and describes the learning objectives supported by the work experience, how those learning objectives were achieved and how that learning was put into practice.

Finally, the student must also provide a portfolio (or something comparable) that shows the work completed and provide some form of documentation confirming the work experience (a resume does not suffice) for which Credit for Prior College-Level Learning is requested.

Goals, Topics, and Objectives

Course Goals
Cooperative education helps students make the school-to-work transition, develop career and program-related learning objectives, and work on applicable skills for employment. Placements should provide students with the opportunity to apply and expand upon knowledge learned in the classroom, and develop the skills acquired in their coursework to align with the standards and expectations set by the worksite.

Core Course Topics

1. Core Career-Focused Topics:

   A. Professional Dress and Demeanor (attitude, posture, courteousness)

   B. Workplace Communication

   C. Interviewing Skills

   D. Resume Building

   E. Networking and Social Media

   F. Seeking Employment

   G. Career Advancement

Program Specific: 1-3 program specific learning objectives will be developed by the instructor for each individual offering.
Student-defined: Students will create 1-3 learning objectives per credit to be approved by instructor for each individual offering.
Career Services-defined: Build a resume that meets standards of Career Services Officer.
Articulate the reasons for professional attire.
Wear professional attire while on the worksite.
Attend career workshop in professional dress.
Display appropriate professional attitude and demeanor while on the worksite.
Interview effectively.
Attend mock interview, give appropriate answers to five 5 questions.
Complete a written job application in a prompt, professional manner with all information legible, error-free, and thorough.
Display understanding of the appropriate use of Social Media sites (Facebook, LinkedIn, and Twitter) during Career Services workshop.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment will be determined by the instructor based on what is in the best interest of the student's academic growth, including future employability of the student. Assessment may include, but isn't limited to:

- Major final project
- Weekly journal
- Creation and attainment of all learning objectives
- Participation in a career-focused workshop
- Consistent and prompt attendance at worksite
- Employer evaluation

General Course Requirements and Recommendations
To be determined by the instructor. Detailed course syllabi will be standardized for all co-op courses and individual course requirements will be available to the AEC and College Council by request "For information only" for each term that the course is offered.

Texts
None

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for ACT 290

ACT297 - Spec Topics in Architectur/Construction

Overview

Subject
Architecture/Construction Tech

Academic Department
Building Sciences

School
Business, Entrepreneurshp, PD

Course Description
This course is designed to explore selected topics as determined by the academic department and the instructor with emphasis on current Architecture/Construction trends. The specific special topic will be announced together with the prerequisites each term. The student can repeat the course when different topics are offered, earning credit for each different topic. This course may be used toward fulfilling the specific degree requirements for an associate degree or certificate.

Course Pre-requisite(s)
As appropriate

Course Co-requisite(s)
As appropriate

Credit Hours
1

Total Contact Hours

Total Instructor Contact Hours:
16

Total Student Contact Hours:
16

Academic Level
Undergraduate

Goals, Topics, and Objectives

Course Goals
To provide the instructional flexibility needed to address the specific needs of a targeted student population.

Core Course Topics
To be determined by the instructor.

To be developed by the instructor for each individual offering.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
All students will be required to complete a comprehensive final examination that assesses the learning of course objectives. This exam must be weighted in a manner so that this exam score is worth a minimum of fifteen percent of the final course grade. All additional assessment of student achievement is left to instructor discretion.

General Course Requirements and Recommendations
To be determined by the instructor. Detailed course syllabi for each section of ACT297 Spec Topics Arch/Construction must be approved by the Technology Division prior to the course being offered. A copy of the specific course syllabus will be presented to the CEC and College Council by the Associate Dean, "For Information Only," at the first meeting after the beginning of the term the course is offered.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for ACT 297

ACT298 - Spec Topics in Arch/Construction

Overview

Subject
Architecture/Construction Tech

Academic Department
Building Sciences

School
Business, Entrepreneurshp, PD

Course Description
This course is designed to explore selected topics as determined by the academic department and the instructor with emphasis on current Architecture/Construction trends. The specific special topic will be announced together with the prerequisites each term. The student can repeat the course when different topics are offered, earning credit for each different topic. This course may be used toward fulfilling the specific degree requirements for an associate degree or certificate.

Course Pre-requisite(s)
As appropriate

Course Co-requisite(s)
As appropriate

Credit Hours
2

Total Contact Hours

Total Instructor Contact Hours:
32

Total Student Contact Hours:
32

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics
To be determined by the instructor.

To be developed by the instructor for each individual offering.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
All students will be required to complete a comprehensive final examination that assesses the learning of course objectives. This exam must be weighted in a manner so that this exam score is worth a minimum of fifteen percent of the final course grade. All additional assessment of student achievement is left to instructor discretion.

General Course Requirements and Recommendations
To be determined by the instructor. Detailed course syllabi for each section of ACT298 Spec Topics in Arch/Constructi must be approved by the Technology Division prior to the course being offered. A copy of the specific course syllabi will be presented to the CEC and College Council by the Associate Dean, "For Information Only," at the first meeting after the beginning of the term the course is offered.

Texts
To be determined by the instructor.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for ACT 298

AH100 - Medical Terminology

Overview

Subject
Health Careers

Academic Department
Health, Education, and Human Services

School
Health & Human Services

Course Description
Presents health and disease medical terminology in relation to human structure and function. Introduces key elements in the formation and modification of medical terms which then is applied to specific body systems.

Credit Hours
4

Total Contact Hours

Total Instructor Contact Hours:
62

Total Student Contact Hours:
62

Course Fee
10

Academic Level
Undergraduate

Goals, Topics, and Objectives

Course Goals
Upon completion of this course, the student will have a foundation in the specialized language of medicine so that they are able to define, spell, pronounce, and analyze the common medical terms as well as understand the context in which these medical terms are used.

Core Course Topics

1. Basic Word Structure
2. Suffixes, roots
3. Prefixes
4. Body as a Whole
5. Digestive System
6. Musculoskeletal System
7. Cardiovascular System
8. Respiratory System
9. Blood System
10. Lymphatic and Immune Systems
11. Urinary System
12. Male Reproductive System
13. Female Reproductive System
14. Integumentary (Skin) System
15. Nervous System
16. Eyes and Ears
17. Endocrine System

Define, spell, and pronounce basic medical word roots, prefixes, and suffixes

Divide common medical terms into their component parts.

Define common medical terms using their component parts.

Construct medical terms by putting word components together using combining forms, prefixes, and suffices for each body system.

Describe anatomical and clinical divisions of the body

Differentiate the directions and planes of the body

Define, pronounce, and spell the common medical terms related to the human body systems

Use common medical terms in both written and verbal formats as related to the human body systems.

Describe the commonly encountered clinical procedures, laboratory tests, diagnostic tests, and therapeutic procedures for each of the human body systems.

Describe an example of a common pathologic condition for each of the human body systems.

Interpret a medical report for a selected body system covered this semester.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
The academic achievement will be assessed using a combination of quizzes, exams, assignments, oral presentations, participation, and a departmental comprehensive final exam.

General Course Requirements and Recommendations
Instructors (or their designees) reserve the right to require students to provide picture identification for test taking, graded papers or projects or other appropriate purposes.

Grading Scale
Grading scale for exams and the final grade:

- 98-100% = A+
- 93-97% = A
- 90-92% = A-
- 87-89% = B+
- 83-86% = B
- 80-82% = B-
- 76-79% = C+
- 70-75% = C
- 67-69% = D+
- 63-66% = D
- 60-62% = D-
- 59% & below = E

All students will be required to complete a comprehensive final exam. The final exam must be at least 20% of the final grade.

Texts
To be determined by the School of Health and Human Services.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for AH 100

AH105 - Basic Life Support Healthcare Providers

Overview

Subject
Health Careers

Academic Department
Health, Education, and Human Services

School
Health & Human Services

Course Description
Designed for individuals working in healthcare or for health career and nursing students preparing for their clinical assignments. Course introduces the theory and skills of CPR for victims of all ages. Features ventilation with a barrier device, a bag-mask device, supplemental oxygen, use of automated external defibrillator (AED), and relief of foreign-body airway obstruction. Upon successful completion of the course, including both written and skills testing, the student receives an American Heart Association healthcare provider card (valid for two years).

Credit Hours
0.5

Total Contact Hours

Total Instructor Contact Hours:
10

Total Student Contact Hours:
10

Course Fee
15

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
Current American Heart Association, Basic Life Support for Healthcare Providers card.

Goals, Topics, and Objectives

Core Course Topics

1. Adult CPR
2. Foreign body obstruction
3. Infant/Child CPR
4. Automated External Defibrillation
5. Safety and special situations
6. Risk factors for heart disease and stroke

State the importance of timely CPR
Demonstrate one rescuer adult CPR on a manikin
Demonstrate two-rescuer adult CPR on a manikin
Demonstrate the use of an AED Unit.
Recognize the signs and symptoms of foreign body obstruction
Demonstrate infant and pediatric CPR in a respiratory and /or cardiac arrest

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Student learning will be assessed with the use of written exams and practical exams

General Course Requirements and Recommendations
Instructors (or their designees) reserve the right to require students to provide picture identification for test taking, graded papers or projects or other appropriate purposes.

Grading Scale
For successful completion of this course and to be eligible for the American Heart Association (AHA) Basic Life Support (BLS) for Healthcare Provider Cards, the students must:

- Score 84% or better on the Final Written Exam. Satisfactorily pass all skill testing.
- Attend all classes.

Texts
Required: American Heart Association, BLS for Healthcare Providers, Channing L. Bete Co., most current edition is essential.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for AH 105

AH121 - Basic Lactation Concepts

Overview

Subject
Health Careers

Academic Department
Health, Education, and Human Services

School
Health & Human Services

Course Description
The first course in a two-semester sequence that examines basic lactation concepts including the history of breastfeeding: Breastfeeding Then and Now; Breastfeeding data; Breast Embryology and Anatomy; Relevant Infant Anatomy; Components of Human Milk; and Lactogenesis and Milk Production.

Course Pre-requisite(s)
Instructor permission

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
15

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Portfolio Review

Credit for Prior College Level Learning (CPCLL) Details
Evidence of completion of a Lactation Education Accreditation and Approval Review Committee (LEAARC) approved course offering 95 hours of didactic instruction, which meets the IBLCE® requirement for lactation education. This is in combination with the CPCLL of AH 122: Applied Principles of Breast Feeding.
See the following website for a list of approved courses.

https://www.leaarc.org/docs/NewApproved_Courses.pdf

Goals, Topics, and Objectives

Core Course Topics

1. History of Breastfeeding
2. Baby-Friendly Initiative
3. Breast feeding safety and quality measures
4. Research and the scientific method
5. Anatomy, physiology & embryology of the breast
6. Anatomy & physiology of the newborn
7. Breastfeeding challenges, ankyloglossia
8. Milk supply, composition, content, storage and galactagogues
9. Pediatric vaccines
10. Cow's milk hypersensitivity

Describe the history and trends in breastfeeding including "Baby-Friendly" initiatives.
Identify the components of a scientific paper and methods for analysis of scholarly papers.
Describe components of breastfeeding safety & quality measures. Identify the anatomy, physiology and embryology of the breast.
Identify the anatomy, physiology and embryology of the breast.
Describe the anatomy and physiology of an infant including components of a normal physical exam.
Define lactogenesis I and II and milk production.
Identify breastfeeding challenges including ankyloglossia and low milk supply.
Define herbal and medicinal galactagogues.
Describe the composition of human milk including nutritional and immunological components.
Describe proper storage of breast milk.
Describe the process breast milk undergoes to become donor milk.
List vaccine categories and major types of vaccines

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Students will be assessed using a combination of tests, quizzes, assignments and participation.

Grading Scale
The grading scale is:

- 98-100%: A+
- 93-97.9%: A
- 90-92.9%: A-
- 87-89.9%: B+
- 83-86.9%: B
- 80-82.9%: B-
- 76-79.9%: C+
- 70-75.9%: C
- 67-69.9% D+
- 63-66.9%: D
- 60-62.9%: D-
- 0 - 59.9%: E

Texts
Determined by program faculty

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for AH 121

AH122 - Applied Principles of Breastfeeding

Overview

Subject
Health Careers

Academic Department
Health, Education, and Human Services

School
Health & Human Services

Course Description
The second course in the two semester sequence that begins with AH-121. The course further instructs students in application of lactation concepts to clinical practice. Normal physiology of lactation and symptoms and treatments of lactation complications will be discussed.

Course Pre-requisite(s)
Instructor permission

Credit Hours
4

Total Contact Hours

Total Instructor Contact Hours:
62

Total Student Contact Hours:
62

Course Fee
15

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Portfolio Review

Credit for Prior College Level Learning (CPCLL) Details
Evidence of completion of a Lactation Education Accreditation and Approval Review Committee (LEAARC) approved course offering 95 hours of didactic instruction, which meets the IBLCE® requirement for lactation education. This is in combination with the CPCLL of AH 121: Basic Lactation Concepts.
See the following website for a list of approved courses.

https://www.leaarc.org/docs/NewApproved_Courses.pdf

Goals, Topics, and Objectives

Core Course Topics

1. Lactogenesis
2. Contraception and milk production
3. Weaning, nutrition and galactopoesis
4. Pain
5. Infection
6. Vasospasms
7. Lactopharmacology
8. Maternal conditions and breastfeeding
9. Viruses and breastfeeding
10. Infant conditions and breastfeeding
11. Gastroesophageal reflux disease (GERD)
12. Normal infant development
13. Safe sleep and feeding of infant
14. Interpretation of breastfeeding research

Define physiology of lactogenesis I and II and anatomic and medical conditions affecting lactogenesis.

Name three actions of oxytocin.

Describe two forms of contraception and the effects of hormone contraceptives on milk supply.

Describe the lactational amenorrhea method (LAM) of contraception.

Explain the difference between endocrine and autocrine control, and the prolactin receptor theory.

List foods contained in the lactating mother's diet.

Describe symptoms and treatment of breast infections and dermatitis in the breastfeeding dyad.

Describe LATCH to assess feeding.

Describe symptoms and treatment of vasospasm in the breastfeeding dyad.

Describe characteristics of a milk bleb.

List causes of breast pain in the lactating mother.

Describe the weaning process.

Describe the effects of Type I diabetes on breastfeeding.

List five maternal medical conditions that can affect breastfeeding.

Describe the root causes and effects of maternal obesity on breastfeeding outcomes.

Name three ways a maternal virus can be transmitted to an infant.

Name two viruses found in the breastmilk of seropositive women and two that are contraindications to breastfeeding in the United States.

Describe the pathophysiology of neonatal jaundice and the management of the jaundiced infant.

Describe the pathophysiology of hypoglycemia and the management of hypoglycemia in the breastfed infant.

Name three infant medical conditions that may affect breastfeeding.

Identify infant-related contraindications to breastfeeding.

Describe the physiology of gastroesophageal reflux and list three management techniques to control GERD.

Describe the categories of infant and child development.

Interpret breastfeeding behaviors through the infant development lens.

Identify safe sleep and recommendations for the breastfed infant.

Describe two theories that apply to lactation practice.

Name the two components of a research study.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Students will be assessed using a combination of tests, quizzes, assignments and participation.

Grading Scale
The grading scale is:

- 98-100%: A+
- 93-97.9%: A
- 90-92.9%: A-
- 87-89.9%: B+
- 83-86.9%: B
- 80-82.9%: B-
- 76-79.9%: C+
- 70-75.9%: C
- 67-69.9% D+
- 63-66.9%: D
- 60-62.9%: D-
- 0 - 59.9%: E

Texts
Determined by program faculty.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for AH 122

AH131 - Medicolegal Principles Hlthcr Practition

Overview

Subject
Health Careers

Academic Department
Health, Education, and Human Services

School
Health & Human Services

Course Description
Provides a core foundation of the basic legal issues specific to the health care practitioner. Focuses upon laws related to the delivery of care as well as health care employment issues.

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Academic Level
Undergraduate

Goals, Topics, and Objectives

Course Goals
Upon completion of this course, the student will have an understanding of basic laws related to the delivery of health care and health care employment.

Core Course Topics

1. The Legal System
2. Legal Concepts as applied to Health Care Employment
3. Professional Liability
4. Privacy Laws
5. Labor Laws affecting Health Care Employment
6. Labor Laws affecting Medical Records
7. Laws related to Safety and Welfare in Health Care Employment
8. Issues related to Living
9. Issues related to Dying
10. Public Duties
11. Healthcare Trends

Discuss the American legal system as it relates to the American health care system.
Differentiate between criminal and civil law.
Define the following: licensure, certification, registration and accreditation.
Discuss how healthcare providers are licensed and regulated.
Explain professional liability and the different types of medical liability insurance.
Describe the elements of a lawsuit.
Explain the four C's of Medical Malpractice Prevention.
Discuss how privacy laws are designed to protect patients.
Describe HIPPA and the responsibilities of health care practitioners concerning privacy, confidentiality and priviledged communication.
Explain the doctrine of informed consent.
Discuss the laws directly related to work place safety.
Discuss accepted criteria for determining death.
Describe the Patient Self-Determination Act including advanced directives and health care proxy.
Outline the major trends which will impact health care for the near future.
Given an assigned court case, summarize and defend your opinion of the case.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Students will be assessed using a combination of assignments, tests, and online participation.

Grading Scale
Grading scale for exams and the final grade:

- 98-100% = A+
- 93-97% = A
- 90-92% = A-
- 87-89% = B+
- 83-86% = B
- 80-82% = B-
- 76-79% = C+
- 70-75% = C
- 67-69% = D+
- 63-66% = D
- 60-62% = D-
- 59% & below = E

Texts
Textbook(s) determined by the School of Health and Human Services.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for AH 131

AH132 - Introduction to Healthcare Professions

Overview

Subject
Allied Health

Academic Department
Health, Education, and Human Services

School
Health & Human Services

Course Description
This course is designed to introduce students to various health care professions. It includes skills and topics common to all healthcare providers such as ethical and legal issues, professionalism, cultural considerations, vital signs, body mechanics, communication, infection control, and evidence based practice. This course will also introduce key elements in the formation and modification of medical terms. This course has a lab hands on component.

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
62

Total Student Contact Hours:
62

Course Fee
25

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Skilled Demonstration, Portfolio Review

Credit for Prior College Level Learning (CPCLL) Details
Skilled Demonstration Details

Skill checks for:

- Basic assessment and vital signs
- Hand washing
- Don/Doff PPE
- Patient transfers

Portfolio Review Details

Portfolio including Certifications/Licensure/Registrations as a healthcare provider. Evidence of implicit bias training Experience with direct patient care Evidence of healthcare education/training covering topics in this course. May include letters of recommendation, syllabus, transcript, curriculum.

Goals, Topics, and Objectives

Core Course Topics

1. Healthcare Professions
2. College Success Strategies
3. Medical Terminology
4. Ethics and Professionalism
5. Vital Signs
6. Cultural Considerations, Diversity, Equity, Inclusion, and Belonging
7. Infection Control and PPE
8. Body Mechanics: Bed Mobility and Transfers
9. Math Computation
10. Evidence Based Practices.
11. Communication
12. Basic Assessment

Identify the role of members of the healthcare team .

Define the various responsibilities of the health care team members.

Identify college success strategies.

Use success strategies within this course.

Define, spell, and pronounce basic medical word roots, prefixes, and suffixes.

Divide common medical terms into their component parts.

Define common medical terms using their component parts.

Construct medical terms by putting word components together using combining forms, prefixes, and suffixes for each body system.

Discuss medical ethics and biomedical ethical principles in health care.

Identify unethical behaviors.

Describe HIPAA and the responsibility of the healthcare provider in relation to HIPAA.

Perform accurate measurements of patient vital signs: Body temperature, blood pressure, heart rate, respiratory rate, and pulse oximetry.

Describe the terminology used when assessing vital signs.

Differentiate normal and abnormal values for vital signs.

Outline the various aspects involved with cultural diversity and psychosocial aspects in the provision of healthcare services.

Identify cultural considerations using the professional healthcare values of legal, ethical, and caring behaviors for the adult client.

Explain the the importance of infection control practices in maintaining the safety of the healthcare provider and the patient.

Identify the preventive procedures in the Standard Precautions.

Demonstrate proper handwashing procedure.

Demonstrate proper donning and doffing of Personal Protective equipment.

Describe the various types of isolation and corresponding precautions.

Describe proper posture and and positioning in sitting, standing and in bed.

Describe negative consequences of poor posture and poor body mechanics.

Identify appropriate patient positions to minimize adverse reactions to immobility.

Demonstrate proper bed mobility techniques.

Demonstrate proper transfer techniques.

Use proper body mechanics throughout the activities in the course.

Calculate appropriate medicine dosage based on patient needs.

Perform unit conversions.

Solve equations pertaining to basic patient measurements.

Define evidence based practice.

Locate and begin to use evidence-based research to improve client outcomes.

Demonstrate effective, professional communication with patients, clients, and other health care professionals.

Describe informed consent as it relates to healthcare.

Identify normal and abnormal findings on basic skin assessment.

Administer a pain assessment and interpret findings.

Administer alertness and orientation assessment and interpret findings.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of student learning will consist of written exams, written assignments or presentations, skill checks, group discussions, and quizzes.

Grading Scale
Grading scale for exams and the final grade:

- 98-100% = A+
- 93-97% = A
- 90-92% = A-
- 87-89% = B+
- 83-86% = B
- 80-82% = B-
- 76-79% = C+
- 70-75% = C
- 67-69% = D+
- 63-66% = D

- 60-62% = D-
- 59% & below = E

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for AH 132

AH141 - Introduction to Public Health

Overview

Subject
Health Careers

Academic Department
Health, Education, and Human Services

School
Health & Human Services

Course Description
Provides a broad overview of the various aspects of public health in the United States. Presents applications, stakeholders, and methods of public health in a way that allows for the identification of strengths and limitations of the current model of care delivery. Also offers an overview of careers available in the area of public health.

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
10

Academic Level
Undergraduate

Goals, Topics, and Objectives

Course Goals
Upon completion of this course, the student will have an understanding of public health and its application in the United States, challenges to delivery of public health, and possible careers in the field.

Core Course Topics
1. Definition of Public Health
2. History of Public Health in the United States
3. Environmental and Occupational Health
4. Social & Behavioral Factors & Health
5. Study Design and Epidemiology
6. Community Health Resources & Initiatives
7. Challenges to Public Health in the United States
8. Government & Politics of Public Health
9. Future Challenges and Direction of Public Health
10. Careers in Public Health

Describe the differences between public health and medical care.
Describe the evolution of public health in the United States.
Analyze a health problem analysis worksheet that incorporates a variety of environmental and occupational health factors.
Describe social and behavioral factors that impact health.
Analyze results and limitations of epidemiologic studies and their measures of disease frequency, incidence, and prevalence.
Compute rates that allow for the evaluation of health in a population.
Analyze rates that allow for the evaluation of health in a population.
Recognize strengths and challenges to public health in the United States.
Describe how the strengths and limitations of the health care delivery model in the United States contributes to challenges in public health.
Recognize the influence of government and politics in public health.
Describe ongoing community health initiatives.
Describe the variety of career opportunities for health professionals in the area of public health.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Students will be assessed using a combination of assignments, tests, and online participation.

Grading Scale
Grading scale for exams and the final grade:

- 98-100% = A+
- 93-97% = A
- 90-92% = A-
- 87-89% = B+
- 83-86% = B
- 80-82% = B-
- 76-79% = C+
- 70-75% = C
- 67-69% = D+

- 63-66% = D
- 60-62% = D-
- 59% & below = E

Texts
Textbook(s) determined through the School of Health and Human Services approval.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for AH 141

AH151 - Introduction to Community Health

Overview

Subject
Health Careers

Academic Department
Health, Education, and Human Services

School
Health & Human Services

Course Description
This is an introduction to community health. Providing awareness of biological, psychosocial, cultural, economic, philosophical, political, ethical, and environmental impact of the health of individuals and the community. It covers factors and determinants of health and individual wellness, history, and predictions for the future.

Course Pre-requisite(s)
ENG131 Introduction College Writing eligible

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Introduction and History of Community Health
2. Community Health Organizations
3. Health Care Systems
4. Epidemiology
5. Maternal, Infant, and Child Health
6. Adolescent, Young Adult, and Adult Health
7. Older Adult Health
8. Racial, Ethnic, and Minority Populations
9. Mental Health
10. Substance Use
11. Environmental Health
12. Injuries
13. Occupational Health

Explain the difference in community health and personal health.
Identify the current major community health issues in the United States and the world.
Identify governmental health agencies and describe their roles in community health.
Describe the roles of non-governmental health agencies as related to community health.
Explain community organizing.
Describe health education and health promotion.
Describe school health programming.
Discuss the importance of disease reporting to the overall health of the community.
Describe the role of epidemiology in the prevention and control of diseases and health conditions.
Describe maternal, infant and child health factors and issues.
Discuss the importance of community health programs on maternal, infant, and childhood morbidity and mortality.
Identify health profiles and risks for various age groups and community health strategies for improvement.
Describe the health profile of older adults.
Describe the community health needs and services for older adults.
Define cultural competence and the importance related to minority community health.
Discuss the importance of diversity in the United States as is relates to community health.

Discuss the legal and practical issues affecting how society deals with mental illness and the impact on the community.

Identify the multicultural, practical and political challenges faced by the community mental health care system.

Describe the risk factors for substance use and the elements of abuse, prevention, and control.

Describe an effective community and school substance use and prevention program.

Discuss the various pollutants both indoor and outdoor and the impact they have on the wellness of the community.

Identify the role of environmental agencies on the safety of food, water, and air quality.

Identify the most prevalent causes of injuries at various age groups and their community health impact.

Discuss prevention initiatives as related to injuries.

Explain common work place health issues and safety/wellness programs.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
The academic achievement will be assessed using a combination or quizzes, exams, assignments, presentations, and participation.

General Course Requirements and Recommendations
Instructors (or their designees) reserve the right to require students to provide picture identification for test taking, graded papers or projects or other appropriate purposes.

Grading Scale
Grading scale for exams and the final grade:

- 98-100% = A+
- 93-97% = A
- 90-92% = A-
- 87-89% = B+
- 83-86% = B
- 80-82% = B-
- 76-79% = C+
- 70-75% = C
- 67-69% = D+
- 63-66% = D
- 60-62% = D-
- 59% & below = E

All students will be required to complete a comprehensive final exam. The final exam must be at least 20% of the final grade.

Texts
To be determined through the School of Health and Human Services.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for AH 151

AH190 - Lactation Consultant Practicum

Overview

Subject
Health Careers

Academic Department
Health, Education, and Human Services

School
Health & Human Services

Course Description
Focuses on the clinical application of lactation concepts to breastfeeding mothers. Select experiences in health care facilities enable students to assess, develop, implement and evaluate the care of the breastfeeding dyad. The course requires 200 hours in the health care setting. This is consistent with Pathway 2 according to International Board of Lactation Consultant Examiners (IBLCE).

Course Pre-requisite(s)
Permission of Instructor

Course Co-requisite(s)
AH121 Basic Lactation Concepts

Credit Hours
4

Total Contact Hours
Total Instructor Contact Hours:
200

Total Student Contact Hours:
200

Course Fee
15

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Professionalism in healthcare
2. Written and oral communication in healthcare
3. Birthing Center Work flow
4. Legal/Ethic/Culture in healthcare
5. World Health Organization (WHO) Code
6. Breastfeeding positions/equipment
7. Manual expression
8. LATCH Score
9. Alternative feeding methods
10. Early feeding expectations
11. Feeding plans
12. Breastpumps

Demonstrate professionalism in the healthcare setting.

Demonstrate effective written and oral communication including documentation in the electronic medical record (EMR).

Apply ethical and legal principles and culturally competent care in the healthcare setting.

Discuss the Birthing Center Workflow.

Discuss WHO code related to the Code of Breastmilk substitutes.

Demonstrate proper breastfeeding positions and use of breastfeeding equipment.

Demonstrate the proper method for manual expression.

Use LATCH score to assess breastfeeding dyad.

Discuss why an alternative feeding method is chosen.

Demonstrate proper use of alternative feeding methods.

Describe early feeding expectations of the newborn.

Develop and implement a feeding plan for breastfeeding dyad.

Explain reasons for breastpump use and the steps necessary for effective pumping.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Clinical evaluations, clinical attendance, student documentation, etc. will be used to assess student academic achievement and psychomotor skills.
Grading Scale
A grading scale of S/U (Satisfactory/Unsatisfactory) will be used in this course.

Students must demonstrate competency in each required skill evaluation to complete this course satisfactorily.

Texts
Determined by program faculty.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for AH 190

AH192 - Lactation Consultant Adv Practicum Pathw

Overview

Subject
Health Careers

Academic Department
Health, Education, and Human Services

School
Health & Human Services

Course Description
Focuses on the clinical application of lactation concepts to breastfeeding mothers. Select experiences in health care facilities enable students to assess, develop, implement and evaluate the care of the breastfeeding dyad. The course requires 200 hours in the health care setting. This course is the second part of the practicum, following AH-190, consistent with Pathway 2 according to International Board of Lactation Consultant Examiners (IBLCE).

Course Pre-requisite(s)
AH190 Lactation Consultant Practicum, or Permission of Instructor

Course Co-requisite(s)
AH122 Applied Princ of Breastfeeding

Credit Hours
4

Total Contact Hours
Total Instructor Contact Hours:
200

Total Student Contact Hours:
200

Course Fee
15

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Identifying breastfeeding complications
2. Milk storage/donor milk
3. Safe formula preparation
4. Medications used during labor and delivery
5. Galactagogues
6. Maternal diet
7. Term and late pre-term breastfeeding infants
8. Teenage breastfeeding mother
9. Stressors affecting the breastfeeding mother
10. Breastfeeding supplementation
11. Effects of maternal and infant conditions on breastfeeding
12. Professional role of International Board Certified Lactation Consultant (IBCLC) in the Neonatal Intensive Care Unit (NICU) and Special Care Nursery (SCN).

Develop and implement a feeding plan for breastfeeding mothers with and without complications.

Describe the proper storage of breastmilk and donor milk.

Describe safe formula preparation.

Identify commonly used medications during labor and delivery and those medications that can affect milk production.

Identify galactagogues.

Identify the components of the maternal breastfeeding diet.

Develop a feeding plan for the late pre-term infant.

Establish rapport and communicate with the teen breastfeeding mom.

Identify psychological and social stressors in the breastfeeding mother.

Identify feelings, emotions, sensations or personal experience with breastfeeding that staff might experience that may affect interactions with families.

List indications for supplementation and the differences between expressed breastmilk and formula as a supplement.

Define slow infant weight gain and its relation to breastfeeding.

Describe the effects of jaundice on breastfeeding.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Clinical evaluations, clinical attendance, student documentation, etc. will be used to assess student academic achievement and psychomotor skills.

Grading Scale
A grading scale of S/U (Satisfactory/Unsatisfactory) will be used in this course.

Students must demonstrate competency in each required skill evaluation to complete this course satisfactorily.

Texts
Determined by program faculty

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for AH 192

ANTH131 - Introduction to Anthropology

Overview

Subject
Anthropology

Academic Department
Social Sciences

School
Liberal Arts

Course Description
Introduces the holistic study of humanity using a multi-faceted approach that draws from the discipline's four field: archaeology, physical, cultural, and linguistic anthropology. Course topics include human evolution and variability, cultural diversity and change, material culture and language. other themes explored include religion, kinship, social and political organization, the neolithic revolution, as well as the intellectual contributions of anthropology to the social sciences.

Course Pre-requisite(s)
Eligible to take ENG courses at HFC

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
10

Academic Level
Undergraduate

General Education Category
Social Sciences

Michigan Transfer Agreement (MTA) Category
Category 4: Social Sciences - Applied Degrees, Category 4: Social Sciences - Transfer Degrees

Goals, Topics, and Objectives

Core Course Topics

1. What is anthropology?
2. Culture
3. Archaeology's view into the past
4. Primates
5. Human evolution
6. Patterns in human biological variation
7. Subsistence strategies and their implications for human social organization
8. Language
9. Sex & Gender
10. Kinship, marriage, and family
11. Cultural evolution
12. Religion
13. Economics
14. Social and political organization
15. Culture change

Identify the four subfields of anthropology and describe the methods and areas of study of each of these fields.

Describe what culture includes, in both the material and non-material realms, and how it influences behavior and thinking.

Define the concepts of cultural relativism and ethnocentrism and demonstrate the utility and danger, respectively, of each of these practices in the modern world.

Discuss human biological evolution and the evolutionary relationships between human and non-human primates.

Explain human cultural evolution, including stone tool use, the Neolithic Revolution, and the rise of cities and states.

Explain the biological limitations of racial classification of human beings and explain why looking at cultural differences is a better approach.

Describe the relationship between language and culture and explain why language is so important to our species.

Explain the different ways that humans have adapted to their environments and the impact of these adaptations on social structure, population size, and health.

Identify cross-cultural differences in marriage, gender, kinship, religious, and subsistence practices.

Discuss how these different beliefs, practices, or traditions are valid responses or solutions to basic human needs.

Develop critical thinking skills by analyzing the complex cultural, political, economic and/or religious implications that are part of the debate between either.

Assessment, Requirements, and Outcomes

- Religious Creationist and Scientific Evolutionary theories of human origins and development, or Racial classification systems and other
- Assessment of Academic Achievement
- Variation.

Assessment of academic achievement may include (but is not limited to) exams, quizzes, homework, and projects.

Texts
Anthropology, William Haviland Anthropology Annual Editions, edited by Elvio Angeloni

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for ANTH 131

ANTH151 - Cultures of North America

Overview

Subject
Anthropology

Academic Department
Social Sciences

School
Liberal Arts

Course Description
Introduces the diverse cultures, histories, and traditions of the indigenous peoples, nations, and civilizations of North America from their origins through the era of European colonization. Examines contemporary social, economic, and political currents as well as challenges faced by Native American communities today. The course employs an interdisciplinary approach that draws from historical archaeology, ethnography, history, studies in colonialism and material culture, literature, and film.

Course Pre-requisite(s)
ENG131 Introduction College Writing eligible

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
10

Academic Level
Undergraduate

General Education Category
Social Sciences

Michigan Transfer Agreement (MTA) Category
Category 4: Social Sciences - Applied Degrees, Category 4: Social Sciences - Transfer Degrees

Goals, Topics, and Objectives

Core Course Topics

1. Stereotypes
2. Theories for the origins of Native Americans
3. Prehistory
4. History of European/Native American relations from invasion to the present
5. Cultures and histories of some of the following culture areas: Southwest, Southeast, Northeast, Northwest, Plains, Great Basin, California, Plateau, Subarctic, or Arctic

Discuss the origins of Native Americans and the development of pre-European cultural patterns throughout North America.

Describe the similarities as well as the wide range of variability within native societies in North America.

Identify the ecological diversity of the native peoples' adjustment to the wide range of resources available.

Identify the general patterns of life within each of the major ecological zones.

Discuss the impact of European and American peoples culture systems on the native North American peoples and their cultures.

Discuss the nature of Native American cultural heritage in today's world
Identify and discuss the stereotypical portrayals associated with Native Americans?

Discuss why Native Americans object to these portrayals.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of academic achievement may include (but is not limited to) exams, quizzes, homework, and projects.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for ANTH 151

ANTH152 - Middle Eastern Peoples and Cultures

Overview

Subject
Anthropology

Academic Department
Social Sciences

School
Liberal Arts

Course Description
Introduces the various ethnic, linguistic, and religious groups as well as cultures of the Middle East with an emphasis on both the Arabs and Islam as two of the most powerful social forces to have shaped the history and culture of the region. Explores Orientalism and western perceptions of the Middle East, colonialism. globalization and identity, nationalism, and other popular ideological currents that continue to influence the region and its peoples. Also examines the history and experiences of Arabs in the United States with a special focus on the large Arab-American community in Dearborn, Michigan.

Course Pre-requisite(s)
Eligible to take ENG courses at HFC

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
10

Academic Level
Undergraduate

General Education Category
Social Sciences

Michigan Transfer Agreement (MTA) Category
Category 4: Social Sciences - Applied Degrees, Category 4: Social Sciences - Transfer Degrees

Goals, Topics, and Objectives

Core Course Topics

1. Geographic, topographic, and political description of the Middle East
2. Definition of the Muslim World
3. Definition of the Arab World
4. Identification of the major ethnic, religious, and linguistic subgroups
5. Overview of Islamic history
6. Similarities and differences between Islam and Christianity (and Judaism)
7. Middle Eastern society and culture
    1. Social traits and cultural values
    2. Rites of passage
    3. Family
    4. Child rearing practices
    5. Women and gender issues
    6. Case studies
8. Arab Americans
    1. History (national)
    2. Demographic distribution (national)
    3. Metro Detroit history and demographics
    4. Case studies

Define/Describe the Middle East region.

Distinguish the terms "Arab" and "Muslim."

Describe the major tenets of Islam.

Compare and Contrast the relationship of Islam to Christianity and Judaism.

Identify at least two subgroups of Muslims.

Explain how Middle Easterners see the role of women in society.

Identify at least two non-Muslim communities in the Middle East.

Describe several misconceptions and/or stereotypes of Middle Eastern society.

Describe the major sub-groups comprising the Arab-American community.

Describe some of the main divisions of Arab Detroit.

Using what you have learned in the course about Middle Eastern cultures a) analyze why dating would be frowned on by Arab Americans living in the United States or b) infer the various reasons why Muslim American women might wear a headscarf or related item of clothing.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of academic achievement may include (but is not limited to) exams, quizzes, homework, and projects.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for ANTH 152

ANTH153 - Introduction to Archaeology

Overview

Subject
Anthropology

Academic Department
Social Sciences

School
Liberal Arts

Course Description
Introduces the branch of anthropology that relates to the study of past societies, cultures, and civilizations. Explores the role of excavation, survey, material culture analysis, dating methods, and interpretation of artifacts, features, inscriptions, and monumental architecture in the ancient world. Examines developments and archaeological discoveries related to various historical periods ranging from the era of pre-human history to the emergence of state-level societies in places such as ancient Mesopotamia, Egypt, and China. Part of the course is also dedicated to familiarizing students with studies and local projects related to the archaeology of Detroit.

Course Pre-requisite(s)
Eligible to take ENG courses at HFC

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
10

Academic Level
Undergraduate

General Education Category
Social Sciences

Michigan Transfer Agreement (MTA) Category
Category 4: Social Sciences - Applied Degrees, Category 4: Social Sciences - Transfer Degrees

Goals, Topics, and Objectives

Course Goals
To introduce students to the field of archaeology and world prehistory. Students will appreciate the importance of and the need to protect our archaeological resources and gain a better understanding of our distant past. In addition, practical experiences will help students improve their critical reading, writing, and cognitive skills.

Core Course Topics

1. What is Archaeology and what do Archaeologists do?
2. Archaeological ethics
3. Archaeological techniques
4. Archaeological analysis
5. Archaeological interpretation
6. Human evolution
    - Human evolution including discussions of the hypotheses and controversies surrounding the Out of Africa Theory, the relationship between Homo sapiens and Neanderthals, the origins of language, and the origins and importance of tool use.
7. The spread of anatomically modern Homo sapiens
    - The spread of anatomically modern Homo sapiens to Australia and North America and the controversy surrounding the timing and routes of these migrations.
8. The rise of agriculture in both the Old and New Worlds
9. The development of social complexity and state level societies with examples from many locations around the world
10. The relevance of archaeology to the modern world

Describe what archaeologists do and how the field has developed.
Explain the importance of ethics in the field of archaeology.
Explain how archaeologists determine the age of sites and artifacts.
Demonstrate a general understanding of basic field methods of site survey, excavation, and recording.
Analyze how archaeologists interpret data to learn about cultural behaviors such as trade, social organization, ethnicity, and cultural history.
Discuss current scientific knowledge about the earliest hominid ancestors including fossil evidence, tool use, hunting, and radiation out of Africa.
Describe current scientific debates about Neanderthals including physical and cultural attributes and their controversial relationships to Homo erectus and anatomically modern Homo sapiens.
Analyze the controversies surrounding the peopling of Australia and North America.
Discuss different theories concerning the rise of agriculture and examine the archaeological evidence for this transition around the world.
Describe the social and economic context for the construction of monumental architecture in societies without state level organization such as Stonehenge, Pueblo Bonito, and Cahokia.
Discuss the archaeological evidence of urbanization, mortuary complexes, and social inequality in early states such as those of Mesopotamia and Egypt.

Explain how the study of archaeology can benefit modern human cultures.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Methods of assessing academic achievement are left to the discretion of individual instructors. These may include such assessment items as exams, quizzes, classroom analysis activities, archaeological site analysis activities, and research papers.

General Course Requirements and Recommendations
General Course requirements are left to the discretion of individual instructors.
Texts
Chazan, Michael. 2013. World Prehistory and Archaeology: Pathways Through Time. Third Edition. New York, NY: Prentice-Hall.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for ANTH 153

ANTH154 - Food, Culture, and Economy

Overview

Subject
Anthropology

Academic Department
Social Sciences

School
Liberal Arts

Course Description
Explores the interconnectedness of food, culture, and economy as an overlapping set of practices and approaches that transcend geographic boundaries. Examines the relationship between food and group identity, status, culture, gender, religion, politics, economics, class, and power using ethnographic, cross-cultural comparisons. Analyzes food traditions in the context of globalization, and looks at the political, economic, social, and cultural impact of global food system structures on the United States and the rest of the world.

Course Pre-requisite(s)
ENG131 Introduction College Writing eligible

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
10

Academic Level
Undergraduate

General Education Category
Social Sciences

Michigan Transfer Agreement (MTA) Category
Category 4: Social Sciences - Applied Degrees, Category 4: Social Sciences - Transfer Degrees

Goals, Topics, and Objectives

Course Goals
There are two underlying goals for this course: 1) introduce students to the importance and role of food in human cultures, and 2) illustrate to students how they are situated food consumers.Students will develop familiarity with the cross-cultural diversity of food traditions and with the common cross-cultural functions/roles of food in human cultures. In addition, students will apply the information and concepts used in the course to their own lives and develop a working knowledge of their own food traditions and of the food systems that contextualize their own food choices and alternatives.
Core Course Topics

1. Key analytical concepts
2. History of food production
3. Functions of food in culture and society
4. Cross-cultural variation in food traditions
   a. Ethnicity/Identity/Solidarity
   b. Social organization/Kinship
   c. Religion/symbolism
   d. Gender Identity/Relations
   e. Power/Domination/Class
   f. Diet/Health/Nutrition
   g. Culture change
5. Food in/and the US
6. Food/traditions in the US
7. Global and local food systems

Describe and apply basic anthropological/sociological concepts involved in the analysis of society and culture generally, and those required to study food in a cultural context.

Illustrate the cross-cultural diversity of food traditions using specific ethnographic examples, and categorize that diversity within the range of human subsistence practices (cross-culturally and in terms of human history).

Organize the common roles/functions of food in human cultures and societies.

Apply any particular culture's/society's food traditions and practices to other aspects of that culture (a holistic understanding of food) including environment, subsistence practices, religion, social organization, etc.

Apply the information, theoretical and empirical, covered in the course; and illustrate the students' own food traditions in relation to aspects of their culture, including the commodity chains, global food systems, and markets that characterize US food production, distribution, and consumption.

Categorize the variation of food traditions in human cultures through the cross-culturally similar functions and uses of food in human culture.

Compare and contrast the social, economic, and cultural components of subsistence, market-based, and industrialized food production/ distribution systems; and evaluate the relative benefits and drawbacks of each.

Assess one's own food cultures/traditions by describing how our food choices are embedded (or not) in larger regional and national patterns of production, distribution, and consumption.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of academic achievement may include (but is not limited to) exams, quizzes, homework, and projects.

General Course Requirements and Recommendations
General course requirements are left to the discretion of individual instructors.

Texts
Choice of course readings is left to the individual instructor.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for ANTH 154

ARA130 - Pre-Elementary Arabic

Overview

Subject
Language Studies

Academic Department
Language Studies

School
Liberal Arts

Course Description
Introduces Modern Standard Arabic: the alphabet, vocabulary, pronunciation, grammar, and listening/speaking skills. Covers basic conversational skills. Presents Arabic culture. **Note:** No prior knowledge of Arabic required. Not open to students with basic reading and writing proficiency in Arabic or those who have earned credit for ARA-131 or its equivalent.

Course Pre-requisite(s)
ENG094 ALP: Reading and Writing/ENG095E ALP for ELL:Reading & Writing eligible or instructor permission

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
10

Academic Level
Undergraduate

General Education Category
Humanities and Fine Arts

Michigan Transfer Agreement (MTA) Category
Category 5: Humanities and Fine Arts - Applied Degrees

Goals, Topics, and Objectives

Course Goals
ARA130 Pre-Elementary Arabic is intended for students with no previous knowledge of Modern Standard Arabic. This course is designed to enable students to reach the Novice Low level on the American Council on the Teaching of Foreign Languages (ACTFL) proficiency scale, focusing on language learning through communication, cultures, connections, comparisons, and communities.

Core Course Topics

1. Greetings, introductions, and farewells
2. Phonetics
3. Alphabet
4. Numbers
5. Gender and article agreement
6. Dialectal differences
7. Core vocabulary
8. Arab culture

Use appropriate greetings, introductions, and farewells.
Demonstrate knowledge of phonetics through the comprehensible pronunciation of letters and words.
Recognize and demonstrate verbal and written knowledge of the Arabic alphabet and sound system.
Recognize and produce the numbers 0-10.
Demonstrate knowledge of gender and article agreement of some nouns, pronouns, and adjectives.
Explain the differences between formal and spoken Arabic.
Define and actively use basic vocabulary in Arabic.
Describe aspects of Arab culture that differ from the U.S. norm.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of academic achievement will be identified and implemented by the class instructor. Methods will include, but not be limited to:

- Participation
- Weekly/regular quizzes
- Homework assignments
- Chapter/unit tests
- Oral/receptive-expressive exam(s)
- Midterm/final exam

Texts
All sections of this level will use a textbook (and any accompanying materials) selected by the course coordinator and approved by the World Languages Committee.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for ARA 130

ARA131 - Elementary Arabic I

Overview

Subject
Language Studies

Academic Department
Language Studies

School
Liberal Arts

Course Description
Introduces the basic skills of reading, writing, speaking, and listening in Modern Standard Arabic within communicative contexts. Covers the elementary pronunciation and grammatical principles necessary for comprehending and expressing simple ideas in both spoken and written Modern Standard Arabic. Presents Arabic culture. NOTE:Requires basic proficiency in recognizing, reading, and writing simple sentences in Modern Standard Arabic.

Course Pre-requisite(s)
ARA130 Pre-Elementary Arabic with a grade of C or better, or one year of high school Arabic with a grade of C or better, AND ENG094 ALP: Reading and Writing/ENG095E ALP for ELL:Reading & Writing eligible.

Credit Hours
4

Total Contact Hours
Total Instructor Contact Hours:
62

Total Student Contact Hours:
62

Course Fee
10

Academic Level
Undergraduate

General Education Category
Humanities and Fine Arts

Michigan Transfer Agreement (MTA) Category
Category 5: Humanities and Fine Arts - Applied Degrees, Category 5: Humanities and Fine Arts - Transfer Degrees

Goals, Topics, and Objectives

Course Goals
ARA131 Elementary Arabic I is designed to enable students to reach the Novice Mid-level on the American Council on the Teaching of Foreign Languages (ACTFL) proficiency scale, focusing on language learning through communication, cultures, connections, comparisons, and communities.

Core Course Topics
1. Autobiographical information
2. Pronouns
3. Present-tense verb
4. Word order/syntax
5. Interrogatives
6. Singular and plural
7. Negations
8. Numbers
9. Comparative and suplerative
10. Fronted predicate
11. Vocabulary
12. Arab culture

Provide autobiographical information.
Demonstrate correct usage of subject, object, and possessive pronouns.
Demonstrate correct usage of present-tense verb forms.
Use correct word order in statements and questions.
Develop and respond to interrogative questions relating to chapter themes.
Supply the correct form for feminine and masculine nouns in the singular and plural.
Modify nominal and verbal sentences with proper forms of negation.
Demonstrate comprehension of numbers 0-100.
Compare and contrast using comparative and superlative forms.
Recognize and produce simple nominal sentences with the fronted predicate.
Write about, speak about, and interpret situations similar to those presented in each chapter of the textbook.
Compare and contrast elements of Arabic culture that differ from the U.S. norm.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of academic achievement will be identified and implemented by the class instructor. Methods will include, but not be limited to:

- Participation
- Weekly/regular quizzes
- Homework assignments
- Chapter/unit tests
- Oral/receptive-expressive exam(s)
- Departmental writing assessment
- Midterm/final exam

Texts
All sections of this level will use a textbook (and any accompanying materials) selected by the course coordinator and approved by the World Languages Committee.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for ARA 131

ARA132 - Elementary Arabic II

Overview

Subject
Language Studies

Academic Department
Language Studies

School
Liberal Arts

Course Description
Further builds reading, writing, speaking, and listening skills in Modern Standard Arabic, focusing on communication in a cultural context. Develops students' knowledge of vocabulary, pronunciation and grammatical principles in order to comprehend and express everyday ideas in both spoken and written Modern Standard Arabic. Presents Arabic culture.

Course Pre-requisite(s)
A grade of C or better in ARA131 Elementary Arabic I or in two years of high school Arabic, or instructor permission

Credit Hours
4

Total Contact Hours
Total Instructor Contact Hours:
62

Total Student Contact Hours:
62

Course Fee
10

Academic Level
Undergraduate

General Education Category
Humanities and Fine Arts

Michigan Transfer Agreement (MTA) Category
Category 5: Humanities and Fine Arts - Applied Degrees, Category 5: Humanities and Fine Arts - Transfer Degrees

Goals, Topics, and Objectives

Course Goals
ARA132 Elementary Arabic II is designed to enable students to reach the Novice High level on the American Council on the Teaching of Foreign Languages (ACTFL) proficiency scale, focusing on language learning through communication, cultures, connections, comparisons, and communities.

Core Course Topics
1. Past tense and negation
2. Future tense and negation
3. Arabic dictionary
4. Nominative and accusative case of present tense
5. Verb patterns
6. Ordinal numbers
7. Accusative nouns (objects)
8. Vocabulary
9. Arab culture

Recognize and produce past tense verb forms and their negation.

Recognize and produce future verb tense forms and their negation.

Identify the concept of roots and patterns using the Arabic dictionary.

Recognize and produce present-tense verbs in the nominative and accusative case.

Distinguish between the ten major verb patterns.

Identify and list information using ordinal numbers.

Identify and produce nouns in the accusative form.

Write about, speak about, and interpret situations using level-appropriate vocabulary.

Analyze aspects of Arabic culture that differ from the U.S. norm, giving specific examples that illustrate such differences.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of academic achievement will be identified and implemented by the class instructor. Methods will include, but not be limited to:

- Participation
- Weekly/regular quizzes
- Homework assignments
- Chapter/unit tests
- Oral and/or expressive-receptive exam(s)
- Midterm/final exam

Texts
All sections of this level will use a textbook (and any accompanying materials) selected by the course coordinator and approved by the World Languages Committee.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for ARA 132

ARA231 - Intermediate Arabic I

Overview

Subject
Language Studies

Academic Department
Language Studies

School
Liberal Arts

Course Description
Follows ARA-132 and is the first of two intermediate-level Modern Standard Arabic courses focusing on communication in a cultural context. Develops students' reading, writing, speaking, and listening skills in Modern Standard Arabic, expands their vocabulary, and deepens their knowledge of pronunciation and grammatical principles in order to comprehend and express essential ideas in both spoken and written Modern Standard Arabic. Presents Arabic culture.

Course Pre-requisite(s)
A grade of C or better in ARA132 Elementary Arabic II or in three years of high school Arabic, or instructor permission

Credit Hours
4

Total Contact Hours
Total Instructor Contact Hours:
62

Total Student Contact Hours:
62

Course Fee
10

Academic Level
Undergraduate

General Education Category
Humanities and Fine Arts

Michigan Transfer Agreement (MTA) Category
Category 5: Humanities and Fine Arts - Applied Degrees, Category 5: Humanities and Fine Arts - Transfer Degrees

Goals, Topics, and Objectives

Course Goals
ARA231 Intermediate Arabic I is designed to enable students to reach the Intermediate Low level on the American Council on the Teaching of Foreign Languages (ACTFL) proficiency scale, focusing on language learning through communication, cultures, connections, comparisons, and communities.

Core Course Topics
1. Nominal sentences
2. Present tense in "jussive" case
3. Definite and indefinite "idafa" (possessive phrase)
4. Verb patterns
5. Relative pronouns
6. Coordinating and subordinating clauses
7. Case endings for nouns and verbs
8. Vocabulary
9. Narrative writing
10. Arabic culture and literature

Describe places using the nominal sentence structure.

Recognize and produce present tense verbs in the jussive case.

Distinguish between definite and indefinite idafa and accurately produce possessive phrases.

Explain and compare the verb patterns and provide examples of each.

Interpret and demonstrate correct usage of relative pronouns.

Interpret and demonstrate correct usage of coordinating and some subordinating clauses.

Use verbal markers to indicate tense and aspect.

Write about, speak about, and interpret situations using level-appropriate vocabulary.

Write simple descriptive and narrative essays on everyday themes.

Describe national, religious, and cultural festivities and traditions in the Arab world and how they compare to U.S. norms.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of academic achievement will be identified and implemented by the class instructor. Methods will include, but not be limited to:

- Participation
- Homework assignments
- Weekly/regular quizzes
- Weekly/regular compositions
- Chapter/unit tests
- Oral presentation(s)/project(s)
- Midterm/final exam

Texts
All sections of this level will use a textbook (and any accompanying materials) selected by the course coordinator and approved by the World Languages Committee.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for ARA 231

ARA232 - Intermediate Arabic II

Overview

Subject
Language Studies

Academic Department
Language Studies

School
Liberal Arts

Course Description
Follows ARA-231 and is the second of two intermediate-level Modern Standard Arabic courses focusing on communication in a cultural context. Further develops students' reading, writing, speaking, and listening skills in Modern Standard Arabic, expands their vocabulary, and deepens their knowledge of pronunciation and grammatical principles in order to comprehend and express a wide range of ideas in both spoken and written Arabic. Presents Arabic culture.

Course Pre-requisite(s)
A grade of C or better in ARA231 Intermediate Arabic I or in four years of high school Arabic, or instructor permission

Credit Hours
4

Total Contact Hours
Total Instructor Contact Hours:
62

Total Student Contact Hours:
62

Course Fee
10

Academic Level
Undergraduate

General Education Category
Humanities and Fine Arts

Michigan Transfer Agreement (MTA) Category
Category 5: Humanities and Fine Arts - Applied Degrees, Category 5: Humanities and Fine Arts - Transfer Degrees

Goals, Topics, and Objectives

Course Goals
ARA-232 is designed to enable students to reach the Intermediate Mid level on the American Council on the Teaching of Foreign Languages (ACTFL) proficiency scale, focusing on language learning through communication, cultures, connections, comparisons, and communities.

Core Course Topics

1. Verb forms in accusative and transitive
2. "Ma" and "min" as relative pronouns
3. Conditional clauses
4. Dual in verbs and object pronouns
5. "Idafa" - possessive phrases with adjectives
6. Simile expressions
7. "Masdar" - infinitive verbs as subjects in nominal sentences
8. Case endings
9. Verbs with long vowels in root
10. Critical listening and speaking
11. Essay composition
12. Arabic culture and literature

Recognize and produce verbs in the accusative and transitive.
Distinguish between ma and min and correctly produce verbal and written sentences using both.
Interpret and demonstrate correct usages of conditional clauses.
Recognize and produce nouns, pronouns and verbs in dual form.
Recognize and produce possessive phrases with adjectives.
Compare and contrast using appropriate structures.
Recognize and produce masdar in nominal sentences.
Provide case endings on nouns and mood endings on verbs including the passive.
Demonstrate correct usage of verbs with long vowels in the root in both past and present tense.
Interpret authentic audio and visual materials and respond critically.
Write simple descriptive, narrative, and informative essays related to themes presented in each chapter/unit of the textbook using register-appropriate vocabulary.
Demonstrate ability to read and analyze selections from major Arabic publications and or classical and contemporary Arabic literature using standard pronunciations, intonation, grammar, structure, and vocabulary.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of academic achievement will be identified and implemented by the class instructor. Methods will include, but not be limited to:

- Participation

- Homework assignments
- Weekly/regular quizzes
- Weekly/regular compositions
- Chapter/unit tests
- Oral presentation(s)/project(s)
- Midterm/final exam

Texts
All sections of this level will use a textbook (and any accompanying materials) selected by the course coordinator and approved by the World Languages Committee.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for ARA 232

ART101 - Two-Dimensional Design

Overview

Subject
Art (Art History)

Academic Department
Fine & Performing Arts

School
Liberal Arts

Course Description
Introduces the basic visual elements and principles of design, along with a wide range of visual problem solving strategies, and theoretical guidelines regarding two-dimensional composition. Covers a variety of art media and processes, and formal art and design vocabulary. This class meets for six (6) hours a week.

Course Pre-requisite(s)
Eligible to take ENG courses at HFC

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
92

Total Student Contact Hours:
92

Course Fee
35

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Portfolio Review, Interview

Credit for Prior College Level Learning (CPCLL) Details
Portfolio Review Details

Provide, in writing, a request to the department. Indicate the rationale for requesting credit and describing the type of college-level learning or course descriptions. Portfolio must contain 3-5 pieces of evidence that illustrates competency in all course learning objectives. Department faculty will evaluate submitted portfolios based on the evaluation rubric. Evaluation rubric and student checklist located in Division Office. Interview with appropriate departmental faculty to discuss the request and work samples.

Interview Details

Interview, given in department-by-department faculty. Faculty will interview applicants based on submitted portfolio and will assess against evaluation rubric. Evaluation rubric and student checklist located in Division Office.

Goals, Topics, and Objectives

Course Goals
1. To expose students to two-dimensional design fundamentals, the principles and elements of design, quality craftsmanship, and graphic skills.
2. To explore design history and ideas influencing the fields of art and design and build a solid foundation in two-dimensional imagery.

Core Course Topics

1. The ruler
2. The grid
3. The Visual Elements and the Principles of Design
4. The Visual Elements
5. The Principles of Design
6. Craftsmanship and professional skill set
7. The Design Process
8. Critical analysis
9. Historical overview

Recognize the markings on a ruler and demonstrate the ability to use it.
Utilize a grid to copy and change the scale of a picture.
Recognize, identify and define the Visual Elements and Principles of Design.
Create original works of art that display an understanding of the visual elements as used in two dimensional art: line, form and volume, space, value, texture and motion
Create original works of art that display an understanding of the principles of design as used in two dimensional art: unity and variety, emphasis and subordination, scale and proportion, balance and rhythm
Employ craftsmanship along with a professional skill set in the construction of original two dimensional compositions.
Demonstrate an understanding of, and effectively utilize, the design process in the development of original two dimensional compositions.
Examine, evaluate, analyze and critique art work created by one self as well as that of peers.*
Discuss and interpret how the Visual Elements and Principles of Design have been used through history.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement

- Class participation
- Class critiques
- Assigned projects
- Quizzes and exams
- Instructor grading and portfolio review

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for ART 101

ART102 - Drawing I

Overview

Subject
Art (Art History)

Academic Department
Fine & Performing Arts

School
Liberal Arts

Course Description
An introductory-level course focusing on the fundamental concepts and skills involved in drawing a range of subject matter from direct observation. Explores line, value, and linear perspective studies in a variety of drawing media. This class meets for six (6) hours a week.

Course Pre-requisite(s)
Eligible to take ENG courses at HFC

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
92

Total Student Contact Hours:
92

Course Fee
20

Academic Level
Undergraduate

Goals, Topics, and Objectives

Course Goals
This course is designed to instill in the student a heightened level of visual awareness and to develop fundamental drawing skills as well as an understanding of basic drawing concepts.

Core Course Topics

1. Materials
2. Contour line
3. Gesture and the expressive qualities of line
4. Value
5. Viewfinder
6. Sighting
7. Perspective
8. Axes and ellipses
9. Hatching, cross hatching and texture
10. Charcoal
11. Vocabulary
12. Contemporary and historical Overview

Recognize and identify the basic materials used in a college level drawing class.
Create a body of work that emphasizes the use of contour lines.
Create a body of work that emphasizes the expressive qualities of line.
Create a multi-step value scale and a continuous value scale with seamlessly modulated transitions.
Demonstrate ability to assess composition within drawing through the use of a viewfinder.
Demonstrate an understanding of sighting and its use in the pursuit of correct perspective.
Illustrate an understanding of linear perspective by creating a drawing of three-dimensional structures with construction lines, object lines, horizon line and vanishing points all indicated.
Demonstrated competence with axes and ellipses by drawing bottles, stemware and similar cylinder forms.
Indicate aces and ellipses with construction lines as well as contour and object lines.
Demonstrate competence in constructing basic forms without either object lines or construction lines by using the hatching, cross hatching, and other textural techniques.
Demonstrate competence in constructing using charcoal as a tonal instrument to convey the illusion of mass using gradients of value.
Define and utilize the vocabulary that relates to a beginning level college drawing class.
Discuss and interpret how drawing has been used by both contemporary and historical artists and assess how one's own work fits in.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
A pre-instruction drawing will be done on the first full day of class that can be compared to a post instruction drawing done the last full day of class.

- Class participation
- Class discussions and critiques
- Portfolio review
- Quizzes and/or examines as determined by the instructor that will be described in the class syllabus

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for ART 102

ART104 - Color Theory

Overview

Subject
Art (Art History)

Academic Department
Fine & Performing Arts

School
Liberal Arts

Course Description
An introduction to the basic principles and theories of color. The course examines color properties, color schemes and harmonies, as well as the illusionary values and emotive qualities of color, and how these are used in art. This class meets for six (6) hours a week.

Course Pre-requisite(s)
Eligible to take ENG courses at HFC

Course Co-requisite(s)
ART101 Two Dimensional Design

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
92

Total Student Contact Hours:
92

Course Fee
50

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Portfolio Review, Interview

Credit for Prior College Level Learning (CPCLL) Details
Portfolio Review Details

Provide, in writing, a request to the department. Indicate the rationale for requesting credit and describing the type of college-level learning or course descriptions. Portfolio must contain 3-5 pieces of evidence that illustrates competency in all course learning objectives. Department faculty will evaluate submitted portfolios based on the evaluation rubric. Evaluation rubric and student checklist located in Division Office. Interview with appropriate departmental faculty to discuss the request and work samples.

Interview Details

Interview, given in department-by-department faculty. Faculty will interview applicants based on submitted portfolio and will assess against evaluation rubric. Evaluation rubric and student checklist located in Division Office.

Goals, Topics, and Objectives

Course Goals
To provide students with a thorough understanding of subtractive (non-digital) color and its applications in the visual arts.
Core Course Topics

1. The properties of color including hue, saturation and value.
2. Scientific and mathematical Color Models including the color wheel, color prism, and the Munsell color tree.
3. Color Harmonies such as monochromatic, analogous, triadic, split complementary, complementary, and their use in a variety of applications.
4. Emotive principles of color in design.
5. Color temperature as related to the illusion of spatial depth and emotive principles.
6. Light and Color as one of the Visual Elements.
7. Color in observational literacy.
8. Color in expressive literacy.

Develop a series of studies employing the properties of color.
Accurately produce a 12-part color wheel using only the three primary colors.
Define and illustrate color harmonies such as monochromatic, analogous, triad, split complementary and complementary.
Develop a project using color to relate a specific mood and/or emotion.
Demonstrate the illusion of depth, as well as emotive values, through the use of color.
Create a work of art using color in conjunction with the other Visual Elements.
Create a project that demonstrates the understanding of the use of color in observational literacy.
Create a project that demonstrates the understanding of the use of color in expressive literacy.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of academic achievement will be identified and implemented by the class instructor. Methods will include, but not be limited to, grades on individual projects, vocabulary of subject taught, class participation and tests on material.

General Course Requirements and Recommendations
The $195 Lab Fee is due to the class matching other studio art classes of being a 3.00 credit hour class that meets for 92.00 contact hours a semester, or 6.00 hours a week. The $50 Lab Fee is to support various lab items that students use throughout the semester in such a class.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for ART 104

ART105 - Three-Dimensional Design

Overview

Subject
Art (Art History)

Academic Department
Fine & Performing Arts

School
Liberal Arts

Course Description
Explores design fundamentals, techniques, materials, and principles of organization as applied to three-dimensional art. This class meets for six (6) hours a week.

Course Pre-requisite(s)
Eligible to take ENG courses at HFC, ART101 Two Dimensional Design or Permission of the Instructor

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
92

Total Student Contact Hours:
92

Course Fee
40

Academic Level
Undergraduate

Goals, Topics, and Objectives

Course Goals
This class explores design fundamentals and the principles of organization as they apply to three-dimensional forms. Assigned projects introduce the student to materials and techniques used in three-dimensional art.

Core Course Topics

1. Vocabulary
2. Visual Elements in Three Dimensional Art
3. Principles of Design in Three Dimensional Art
4. Craftsmanship
5. Contemporary and historical overview

Recognize and understand the vocabulary used in working with three-dimensional design.

Create a body of original works of art that display an understanding of the visual elements as used in three-dimensional art: line, form and volume, space, color, texture and motion.

Create a body of original works of art that display an understanding of the principles of design as used in three-dimensional art: unity and variety, emphasis and subordination, scale and proportion, balance and rhythm.

Demonstrate an understanding and competence in addressing craftsmanship in three-dimensional art.

Compare and contrast historical and contemporary three-dimensional art and discuss as assess how one's own work fits into this realm.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement

- Evaluation of hands-on projects
- Homework assignments
- Quizzes
- Class participation
- End of term exam

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for ART 105

ART107 - Photoshop

Overview

Subject
Graphic Design

Academic Department
Fine & Performing Arts

School
Liberal Arts

Course Description
Provides an introductory-level study of digital imaging with Photoshop. Including print, web, illustration, image enhancement/correction and animation techniques. This is the first digital course for the Digital and Graphic Arts programs.

Course Pre-requisite(s)
Eligible to take ENG courses at HFC

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
30

Academic Level
Undergraduate

General Education Category
Humanities and Fine Arts

Michigan Transfer Agreement (MTA) Category
Category 5: Humanities and Fine Arts - Applied Degrees, Category 5: Humanities and Fine Arts - Transfer Degrees

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Portfolio Review, Interview

Credit for Prior College Level Learning (CPCLL) Details
Portfolio Review Details

Provide, in writing, a request to the department. Indicate the rationale for requesting credit and describing the type of college-level learning or course descriptions. Portfolio must contain 3-5 pieces of evidence that illustrates competency in all course learning objectives. Department faculty will evaluate submitted portfolios based on the evaluation rubric. Evaluation rubric and student checklist located in Division Office. Interview with appropriate departmental faculty to discuss the request and work samples.

Interview Details

Interview, given in department-by-department faculty. Faculty will interview applicants based on submitted portfolio and will assess against evaluation rubric. Evaluation rubric and student checklist located in Division Office.

Goals, Topics, and Objectives

Core Course Topics

1. Photoshop workspace including panels and tool applications. Creating, printing, and saving new documents appropriate for print, web and interactive uses.
2. Selection tools. Creating masks for editing. Working with blend modes to combine images and textures.
3. Image restoration and correction using Photoshop editing tools.
4. Taking Photoshop to the next level, using layers, blend modes, adjustment layers and the fundamentals of design to develop a composited image. Destructive and non-destructive "Live" adjustments, isolating elements from an image and editing with
5. Introduce Photoshop animation process including panels and layers.
6. Photoshop for web applications. Navigation, aesthetic composition, wireframes and generating image assets.

Demonstrate an ability to work with the drawing, editing and painting tools in Photoshop.

Distinguish between and use various color modes including RGB, CMYK, and Grayscale.

Demonstrate understanding of file formats supported by Photoshop for use in web, print and interactive applications.

Apply correct layer structures including creating create new layers, duplicate, delete, name, group and rearrange layers.

Produce complex selections using a variety of selection tools in Photoshop, creating both masks and channels.

Modify image size in Photoshop without distortion using the image size window and transform tools.

Apply Photoshop editing tools to correct image flaws and color for both restoration and enhancement.

Distinguish between "Live" and destructive adjustments and apply in Photoshop.

Construct a new composition by modifying several photographic images.

Recognize appropriate images and requirements for use.

Construct a simple animated sequence.

Design as a capstone project, a website mock-up, incorporating all major course objectives.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Course work includes, but is not limited to:

- In-class exercises
- Class Participation includes discussions and critiques
- Workspace quiz, midterm and final
- Composition Project
- Website Capstone Project

Texts
Text to be determined by the department/instructor.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for ART 107

ART108 - Introduction to Animation

Overview

Subject
Graphic Design

Academic Department
Fine & Performing Arts

School
Liberal Arts

Course Description
An introduction to animation using industry standard animation software. Primary emphasis is on creating animated sequences using software tools and gaining an understanding of how to develop a sequence of action.

Course Pre-requisite(s)
ART102 Drawing I, ART107 Photoshop, or instructor permission.

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
30

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Portfolio Review, Interview

Credit for Prior College Level Learning (CPCLL) Details
Portfolio Review Details

Provide, in writing, a request to the department. Indicate the rationale for requesting credit and describing the type of college-level learning or course descriptions. Portfolio must contain 3-5 pieces of evidence that illustrates competency in all course learning objectives. Department faculty will evaluate submitted portfolios based on the evaluation rubric. Evaluation rubric and student checklist located in Division Office. Interview with appropriate departmental faculty to discuss the request and work samples.

Interview Details

Interview, given in department-by-department faculty. Faculty will interview applicants based on submitted portfolio and will assess against evaluation rubric. Evaluation rubric and student checklist located in Division Office.

Goals, Topics, and Objectives

Core Course Topics

1. Time-based animation techniques and story-telling.
2. The animated workspace, design fundamentals of animation including keyframe animation and motion tweens.
3. Drawing and animation tools.
4. Saving and rendering files for a variety of output.

Visualize a story arc or sequence of action for animating.
Develop storyboards for use in the animation process.
Demonstrate understanding of animated sequencing.
Construct a series of simple to complex shapes using the drawing and painting tools.
Complete simple animated sequences.
Employ appropriate file formats for output: GIF, Mp4, .MOV, SWF

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement

- Tests as described in the course syllabus.
- Class Participation includes discussions and critiques.
- Projects as described in the course syllabus.
- Student demo reel.

Texts
Text to be determined by the department/instructor.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for ART 108

ART111 - Digital Media

Overview

Subject
Graphic Design

Academic Department
Fine & Performing Arts

School
Liberal Arts

Course Description
An introduction to the usage of digital media as it applies within a studio art discipline. Various types of imaging software, the use of time-based media as well as cross platform construction will be covered. This class meets for six (6) hours a week.

Course Pre-requisite(s)
Eligible to take ENG courses at HFC, ART101 Two Dimensional Design, ART102 Drawing I

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
92

Total Student Contact Hours:
92

Course Fee
50

Academic Level
Undergraduate

General Education Category
Computer Technology

Goals, Topics, and Objectives

Course Goals
To develop understanding of the role digital media has in contemporary art making. The student will be introduced to image based software, time based media development, and cross platform construction in the creation of a body of art work. Vocabulary and art criticism as it relates to digital media will be introduced throughout the class.

Core Course Topics

1. Origins of digital based media as an art form
2. Digital Media as a contemporary art form
3. Image based software as used in digital media based art
4. Time based media
5. Cross platform construction
6. The vocabulary of digital media based art
7. Art criticism as it relates to digital media based art
8. Computer Literacy

Develop an understanding of the background and origins of digital based media.
Develop an understanding of digital media as used in contemporary art.
Utilize of both vector based and raster based imaging software in making art.
Develop a time based media piece as a work of digital media based art.
Build a work of art using a variety of digital media platforms.
Develop a sense of the vocabulary that is commonly used within digital media based art.
Analyze and critique one's own digital media projects, as well as those of classmates, and to speak knowledgeably about the works of well known artists within the genre. operate basic computer hardware, including common input, output, and storage devices.
Log in and out of the HFC network, utilize WebAdvisor, perform basic tasks such as finding, saving, copying and printing files, sending and receiving email with and without attachments.
Demonstrate knowledge of word processing, spreadsheet and presentation applications by creating, formatting, and configuring documents.
Demonstrate utilization of the WWW including use of a browser for internet access, use of search engines, and evaluation of credibility and quality of WWW sites.
Communicate professionally in an online environment as well as demonstrate proper ethical and legal behavior in online community as well as understand common threats to computer security and privacy such as plagiarism, viruses, phishing and identity theft.

Demonstrate Computer Literacy knowledge. by successfully being able to: operate basic computer hardware, including common input, output, and storage devices. 1. Log in and out of the HFC network, utilize WebAdvisor, perform basic tasks such as finding, saving, copying and printing files, sending and receiving email with and without attachments. 2. Demonstrate knowledge of word processing, spreadsheet and presentation applications by creating, formatting, and configuring documents. 3. Demonstrate utilization of the WWW including use of a browser for internet access, use of search engines, and evaluation of credibility and quality of WWW sites. 4. Communicate professionally in an online environment as well as demonstrate proper ethical and legal behavior in online community as well as understand common threats to computer security and privacy such as plagiarism, viruses, phishing and identity theft.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of Academic Achievement will be identified and implemented by the class instructor. Methods will include, but not be limited to, grades on individual projects, vocabulary, class participation, and tests on material.

General Course Requirements and Recommendations
The $195.00 Lab Fee is due to the class matching other studio art classes of being a 3.00 credit hour class that meets for 92.00 contact hours a semester. The $50.00 Course Fee covers Department purchased supplies that are need to run the class.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for ART 111

ART112 - Drawing II

Overview

Subject
Art (Art History)

Academic Department
Fine & Performing Arts

School
Liberal Arts

Course Description
This is and intermediate college level drawing class that stresses drawing fundamentals through working with a variety of subject matter observed firsthand. This class meets for six (6) hours a week.

Course Pre-requisite(s)
ART102 Drawing I with a "C" grade or better

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
92

Total Student Contact Hours:
92

Course Fee
20

Academic Level
Undergraduate

Goals, Topics, and Objectives

Course Goals
This course is designed to further increase the observational skills, conceptual awareness, and drawing capabilities developed in Drawing I.

Core Course Topics

1. Materials
2. Sighting
3. Cross contours and values
4. Chiaroscuro
5. Linear copywork
6. Value copywork
7. Self portrait
8. Additive and Subtractive drawing
9. Perspective
10. Tonal Form
11. Tromp L'oeil
12. Contemporary and historical overview

Recognize and identify the materials used in an intermediate college level drawing class.

Demonstrate proper use of the sighting process to identify and analyze proper positions and proportions of horizontal and vertical forms in space.

Demonstrate competence in copywork from a masterpiece drawing in which line is the dominant method of development.

Employ chiaroscuro to illustrate values of forms in space.

Demonstrate competence in copywork from a masterpiece drawing in which tone is the dominant method of development.

Create a self portrait with emphasis on proper proportions and tonal values.

Create a drawing using the additive and subtractive method on toned paper.

Demonstrate an understanding of two point perspective by creating a drawing with several three dimensional objects along with all constructions lines, object lines, horizon line and vanishing points.

Create a drawing using toned (black, grey or blue) paper and contrasting drawing material (white or sienna conte.)

Create a Tromp L'oeil drawing using both line and tone.

Discuss and interpret how drawing has been used by both contemporary and historical artists and assess how one's own work fits in.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement

- Class Participation
- Class Critiques
- Midterm portfolio review
- Final portfolio review
- Quizzes and/or tests as determined by the instructor and described in the course syallabus

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for ART 112

ART113 - Life Drawing I

Overview

Subject
Art (Art History)

Academic Department
Fine & Performing Arts

School
Liberal Arts

Course Description
An introductory college level class on how to draw the human figure. Discusses proportion and anatomy through direct observation, and explores a variety of drawing media. This class meets for six (6) hours a week.

Course Pre-requisite(s)
Eligible to take ENG courses at HFC, ART102 Drawing I or Instructor Permission

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
92

Total Student Contact Hours:
92

Course Fee
40

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics
1. Gesture
2. Line quality
3. Measuring
4. Composition
5. Value
6. Foreshortening
7. Anatomy
8. Portraiture
9. Vocabulary
10. Visual Overview

Illustrate the figure in full with gestural linear analysis.

Demonstrate forms of line variation.

Apply correct proportions in a drawing by using measurement and sighting methods.

Apply measuring skills along with the gestural quality of the model to best compose a composition within the picture plane.

Create a body of work that emphasizes the illusion of 3D form through tonal gradations in charcoal.

Competently illustrate drawing the figure foreshortened in space.

Illustrate familiarity with the skeletal structure.

Illustrate an understanding of the skull and features of the human face.

Define and utilize vocabulary that relates to college drawing classes and basic anatomy.

Discuss various artists' figurative work and interpret techniques.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
A pre instruction drawing will be done the first day of class to compare with drawings done at the end of the semester

- Class participation
- Class discussion and critiques
- Portfolio review
- Quizzes and/or exams as determined by the instructor that will be described in the course syllabus

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for ART 113

ART114 - Graphic Design Studio 1

Overview

Subject
Graphic Design

Academic Department
Fine & Performing Arts

School
Liberal Arts

Course Description
An introduction to visual communication using the Adobe Creative Software Suite. Provides a working knowledge of InDesign and Illustrator. Introduction to the fundamentals and principles of design. Explores the design and development of a variety of media, including multi-page print documents and digital output. This class meets for six (6) hours a week.Students are expected to have access to the Adobe Creative Cloud applications including Photoshop, Indesign, Illustrator, Acrobat, AfterEffects and XD.

Course Pre-requisite(s)
Eligible to take ENG courses at HFC. ART101 Two Dimensional Design ART107 Photoshop or Instructor Permission.

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
92

Total Student Contact Hours:
92

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Portfolio Review, Interview

Credit for Prior College Level Learning (CPCLL) Details
Portfolio Review Details

Provide, in writing, a request to the department. Indicate the rationale for requesting credit and describing the type of college-level learning or course descriptions. Portfolio must contain 3-5 pieces of evidence that illustrates competency in all course learning objectives. Department faculty will evaluate submitted portfolios based on the evaluation rubric. Evaluation rubric and student checklist located in Division Office. Interview with appropriate departmental faculty to discuss the request and work samples.

Interview Details

Interview, given in department by department faculty. Faculty will interview applicants based on submitted portfolio and will assess against evaluation rubric. Evaluation rubric and student checklist located in Division Office.

Other Details

Determined by department.

Goals, Topics, and Objectives

Core Course Topics
1. InDesign basics
2. Illustrator basics
3. Fundamentals of typesetting.
4. Design methodology.
5. Fundamentals of design including grid, layout, and hierarchy.
6. Color theory in relation to print and digital media design.
7. InDesign time saving techniques: styles, layers, master pages, and local pages.
8. Saving documents for output, using correct file formats.
9. Vector graphics.

Use tools, panels and menus to manipulate elements within a document.

Use tools, panels and menus.

Use pen and shape tools in the tool palette to create graphic elements.

Define basic print terminology.

Construct typographic solutions including appropriate typeface selection.

Use typesetting tools such as kerning, tabs, indents, letter, and line spacing.

Demonstrate conceptual development, research, and sketching.

Create multi-page and single page design documents which employ both hierarchy and grid.

Express visual harmony through the use of color theory.

Use CMYK and RGB in both print and online formats.

Construct a multi-page document using time saving techniques.

Choose correct file saving formats for a variety of outputs.

Use document pre-press techniques for packaging, digital output, and PDF formats.

Use Illustrator to create vector graphics for use in a variety of media.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement

- Assigned projects including single, multi-page print and web-based documents
- Test as described in the course syllabus
- Class Participation includes discussions and critiques
- Projects as described in the course syllabus

Texts
Text determined by department/instructor

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for ART 114

ART116 - Painting I

Overview

Subject
Art (Art History)

Academic Department
Fine & Performing Arts

School
Liberal Arts

Course Description
A beginning level college painting class that explores traditional and contemporary approaches in observational painting. This class meets for six (6) hours a week.

Course Pre-requisite(s)
Eligible to take ENG courses at HFC, ART101 Two Dimensional Design and ART102 Drawing I, or Instructor Permission.

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
92

Total Student Contact Hours:
92

Course Fee
20

Academic Level
Undergraduate

Goals, Topics, and Objectives

Course Goals
Students in this course will develop an awareness of the basic concepts, methods, and materials involved in oil painting. Exercises are designed to build upon skills developed in previous art classes while learning about the unique capabilities of oil paint. Emphasis will be placed upon understanding the painting process as a concept of dynamic color/shape relationships.

Core Course Topics

1. Vocabulary
2. Preparation
3. Color mixing
4. Brushwork
5. Traditional techniques
6. Contemporary techniques
7. Values
8. Individualize palettes
9. Canvas stretching
10. Copy masterwork
11. Self-portrait

Apply all assigned vocabulary terms in class discussions.
Maintain an organized palette with all related materials for oil painting.
Demonstrate the ability to apply colors, mediums and solvent, and learn to mix them according to their attributes and color range necessary for individual projects.
Compare the attributes of each type of brush and use them successfully for various desired effects.
Demonstrate knowledge about grisaille, glazing, scumbling, and feathering approaches in painting.
Demonstrate knowledge about alla prima, impasto, open edge effects, and color blocks interaction approaches in painting
Compose and describe forms using monochrome value as the principle means of development.
Create a still life image restricted to warm/cool colors.
Demonstrate the ability to stretch a canvas on standard stretcher bars.
Create a copy of a masterpiece painting focusing on color, composition, and proportion.
Create a self-portrait with emphasis on composition, color, and proportion.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
A pre-instruction painting will be done on the first full day of class to compare with work done at the end of the semester.

- Class participation
- Class critiques
- Portfolio reviews
- Quizzes and/or exams as determined by the instructor that will be described in course syllabi.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for ART 116

ART117 - Story Boarding for Design

Overview

Subject
Graphic Design

Academic Department
Fine & Performing Arts

School
Liberal Arts

Course Description
This time based graphic course will provide experience with linear sequencing as well as exploring the users experience with a digital product. This course will develop skills used in 2D animation, motion and interactive experience design. This class meets for three (3) hours a week.

Course Pre-requisite(s)
Eligible to take ENG courses at HFC ART102 Drawing I, ART107 Photoshop or Instructor Permission

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
30

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Portfolio Review, Interview

Credit for Prior College Level Learning (CPCLL) Details
Portfolio Review Details

Provide, in writing, a request to the department. Indicate the rationale for requesting credit and describing the type of college-level learning or course descriptions. Portfolio must contain 3-5 pieces of evidence that illustrates competency in all course learning objectives. Department faculty will evaluate submitted portfolios based on the evaluation rubric. Evaluation rubric and student checklist located in Division Office. Interview with appropriate departmental faculty to discuss the request and work samples.

Interview Details

Interview, given in department-by-department faculty. Faculty will interview applicants based on submitted portfolio and will assess against evaluation rubric. Evaluation rubric and student checklist located in Division Office.

Goals, Topics, and Objectives

Course Goals
To provide students with an understanding of techniques focused on the preliminary development of a sequence of events or series of actions.
Core Course Topics

1. Story Construction
2. Storyboard Development
3. Style Frames
4. Sequential construction of a specific communication.

Illustrate a sequence of events that communicate a message.
Set up a sequence of events that tell a story.
Set up a sequence of events that allows for a series of actions in an interactive experience.
Construct digital style frames which demonstrate visual aesthetic of the communication message.
Construct an original concept for a interactive experience as a capstone project.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement

- Class Participation includes discussions and critiques
- Projects as described in the course syllabus
- Unit Quizzes and
- Final Capstone project

Texts
Text to be determined by instructor.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for ART 117

ART121 - Art History I - Pre-Historic to Medieval

Overview

Subject
Art (Art History)

Academic Department
Fine & Performing Arts

School
Liberal Arts

Course Description
A survey of the development of visual arts from the pre-historic to the end of medieval period, covering major civilizations and cultures worldwide. Offers students strong background for understanding the visual art as a vehicle of communication in its functional context. Provides cross-cultural understanding through continuous critical thinking perspective. Enables students to comprehend and interpret works of art by examining the contextual characteristics of the work, its subject, functionality and the culture(s) that produced it. A field trip to a major museum and other appropriate sites is required to strengthen student knowledge.

Course Pre-requisite(s)
Eligible to take ENG courses at HFC

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
15

Academic Level
Undergraduate

General Education Category
Humanities and Fine Arts

Michigan Transfer Agreement (MTA) Category
Category 5: Humanities and Fine Arts - Applied Degrees, Category 5: Humanities and Fine Arts - Transfer Degrees

Goals, Topics, and Objectives

Course Goals
This course is a fundamental survey concerned with the growth of civilization and development of art in relation to history and technology. A variety of media are presented: sculpture, architecture, painting, and the applied arts. These are studied in terms of their historical context.
Core Course Topics

1. Prehistoric Art
2. Ancient near East
3. Ancient Egypt
4. Prehistoric Aegean
5. Ancient Greece
6. Ancient Southeast Asia
7. Early China, Early Japan
8. Etruscan and Ancient Rome
9. Jewish, Early Christian, Byzantium, Islamic Art
10. Ancient Americas
11. Pre Colonial Africa
12. Early Medieval, Romanesque and Gothic

Demonstrate an aesthetic awareness of Prehistoric Art and explain the importance of Prehistoric Art within its cultural context.
Demonstrate an aesthetic awareness of the art of Ancient near East and explain the importance of this style within its cultural context.
Demonstrate an aesthetic awareness of the art of Ancient Egypt and explain the importance of Egyptian art within its cultural context.
Demonstrate an aesthetic awareness of Prehistoric Aegean art and explain the importance of this style within its cultural context.
Demonstrate an aesthetic awareness of the art of Ancient Greece and explain the importance of these styles within its cultural context.
Demonstrate an aesthetic awareness of the art of Ancient Southeast Asia and explain the importance of this art within its cultural context.
Demonstrate an aesthetic awareness of the art of both early China and early Japan and explain the importance of these styles within their cultural context.
Demonstrate an aesthetic awareness of Etruscan and ancient Roman art and explain the importance of these styles within their cultural context.
Demonstrate an aesthetic awareness of the artistic styles that developed in central Europe and the Middle East during the first Millennium CE and explain the importance of these styles within their cultural context.
Demonstrate an aesthetic awareness of art of the ancient Western Hemisphere and explain the importance of these styles within its cultural context.
Demonstrate an aesthetic awareness of African art prior to European colonialism and explain the importance of these styles within their cultural context.

Demonstrate an aesthetic awareness of the artistic styles that developed in central and western Europe during the first half of the second Millennium CE and explain the importance of this art within its cultural context.

Additional Learning Outcome information
In addition to the above Learning Outcomes, students should be able to:

- Contrast basic stylistic changes within different time periods and regions of the world
- Illustrate how techniques were developed in creating visual imagery
- Research an area of study and discuss its importance
- Explain various art ideas in relation to the political, philosophical, and religious events of each period

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Quizzes given throughout the course. Exams are given within the class at measurable intervals. A written final examination is based on visual imagery studied throughout the course. Assessing a written Research Paper with major points evaluated. Assessing key concepts of Research Paper within an oral presentation in a group setting.

Texts
Gardner's Art Through the Ages, A Global History Vol. 1

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for ART 121

ART122 - Art History Survey II

Overview

Subject
Art (Art History)

Academic Department
Fine & Performing Arts

School
Liberal Arts

Course Description
A survey of the development of visual arts from the early Renaissance to the present time. Offers broad background for understanding the visual art as a vehicle of communication in its functional context. Provides a concise appreciation to the development of socioeconomic, religious and political characteristics of the covered periods. Enables students to acquire a broad scope of cross-cultural understanding through continuous critical thinking perspective. Discusses how to comprehend and interpret works of art by examining the contextual characteristics of the work, its subject, functionality and the culture(s) that produced it. A field trip to a major museum and other appropriate sites is required to strengthen student knowledge.NOTE: It is recommended that a student who plans to take both ART-121 and ART-122 start with ART-121 first.

Course Pre-requisite(s)
Eligible to take ENG courses at HFC

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
15

Academic Level
Undergraduate

General Education Category
Humanities and Fine Arts

Michigan Transfer Agreement (MTA) Category
Category 5: Humanities and Fine Arts - Applied Degrees, Category 5: Humanities and Fine Arts - Transfer Degrees

Goals, Topics, and Objectives

Course Goals
This course in art history surveys art from the Renaissance to the present. The course concentration examines the evolution of artistic styles and their relationship to technology and civilization. A variety of media will be explored including painting, sculpture, applied arts, architecture, and graphics.
Core Course Topics

1. Late Gothic, 14th Century Italy
2. 15th century Northern Europe and Spain
3. Early Renaissance
4. High Renaissance and Mannerism
5. 16th century Northern Europe and Spain
6. Baroque and Rococo
7. Southeast Asia, Later China, Later Japan
8. Neo-Classicism, Romanticism and mid-19th Century European Art
9. Modernism of the Twentieth/Twenty-First Century

Demonstrate an aesthetic awareness of Late Gothic and 14th Century Italian art and explain the importance of these styles within their culture context.

Demonstrate an aesthetic awareness of 15th century art from Northern Europe and Spain and explain the importance of these styles within their culture context.

Demonstrate an aesthetic awareness of Early Renaissance art and explain the importance of these styles within their culture context.

Demonstrate an aesthetic awareness of High Renaissance and Mannerism artistic styles and explain the importance of these developments within their culture context.

Demonstrate an aesthetic awareness of 16th century art from Northern Europe and Spain and explain the importance of these styles within their culture context.

Demonstrate an aesthetic awareness of the Baroque and Rococo artistic styles and explain the importance of these developments within their culture context.

Demonstrate an aesthetic awareness of art of Southeast Asia, later China and later Japan and explain the importance of these styles within their culture context.

Demonstrate an aesthetic awareness of Neo-Classicism, Romanticism and mid to late 19 century European Art and explain the importance of these styles within their culture context.

Demonstrate an aesthetic awareness of art since the birth of Modernism of the Twentieth and Twenty-First century and explain the importance of these developments within their culture context.

Additional Learning Outcome information
In addition to the above Learning Outcomes, students should be able to:

- Contrast basic stylistic changes with different time periods and regions of the world
- Illustrated how techniques were developed in creating visual imagery
- Research an area of study and discuss its importance
- Explain various art ideas in relation to the the political, philosophical and religious events of each period

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Quizzes are given throughout the course. Exams are given within the class at measurable intervals. A written final examination based on visual imagery studied throughout the course. A written Research Paper with major points evaluated. Assessing key concepts of the Research Paper within an oral presentation in a group setting.

Texts
Gardner's, Art Through the Ages, A Global History, Vol. 2

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for ART 122

ART123 - History of Modern Art

Overview

Subject
Art (Art History)

Academic Department
Fine & Performing Arts

School
Liberal Arts

Course Description
A survey of major visual art forms, techniques, styles, movements, and personalities of the nineteenth, and twentieth/twenty-first centuries. Explores architecture, sculpture, painting, printmaking, graphic design, and non-traditional art forms of the modern and post-modern era. Offers broad knowledge for understanding the visual art and its societal function. Presents learning tools to comprehend and interpret works of art by examining the contextual characteristics, subject matter, functionality, and the culture(s) that produced the artwork. A field trip to a major museum and other appropriate art sites is required to strengthen student's knowledge.

Course Pre-requisite(s)
Eligible to take ENG courses at HFC

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
10

Academic Level
Undergraduate

General Education Category
Humanities and Fine Arts

Michigan Transfer Agreement (MTA) Category
Category 5: Humanities and Fine Arts - Applied Degrees, Category 5: Humanities and Fine Arts - Transfer Degrees

Goals, Topics, and Objectives

Course Goals
This survey course is designed to develop understanding and appreciation for modern visual art and architecture from the late nineteenth century to the present (impressionism to post modernism). The course concentration examines the evolution of artistic styles and their relationship to technology and civilization. A variety of media will be explored including painting, sculpture, printmaking, graphic design, and architecture.

Core Course Topics

1. The Origins of Modern Art
2. Impressionism and Post Impressionism
3. Art Nouveau and the Beginnings of Expressionism; Expressionism in Germany; Cubism; Early Twentieth Century Architecture
4. Western Europe during World War 1; Futurism; Dadaism; De Stijl; Bauhaus; Surrealism
5. American Art Before World War I
6. American Art Betweem the World Wars
7. Abstract Expressionism
8. Nouveau Realisme and Pop Art
9. Modernism in Architecture
10. Conceptualism and Activist Art
11. Minimalism
12. Post-Modernism
13. Contemporary Art and Globalization

Demonstrate an aesthetic awareness of the art of Impressionism and Post Impressionism, and explain the importance of these developments within their cultural context.

Demonstrate an aesthetic awareness of the art of Art Nouveau style as well as the Beginnings of Expressionism; Expressionism in Germany; Cubism; and Early Twentieth Century Architecture and explain the importance of these developments within their cultural context.

Demonstrate an aesthetic awareness of the art of Western Europe during World War 1; Futurism; Dadaism; De Stijl; Bauhaus; and Surrealism and explain the importance of these developments within their cultural context.

Demonstrate an aesthetic awareness of American art prior to World War I and explain the importance of this developments within its cultural context.

Demonstrate an aesthetic awareness of American art between World War I and World War II and explain the importance of these developments within its cultural context.

Demonstrate an aesthetic awareness of Abstract Expressionism and explain the importance of this developments within its cultural context.

Demonstrate an aesthetic awareness Nouveau Realisme and Pop Art and explain the importance of these developments within its cultural context.

Demonstrate an aesthetic awareness Modernism in architecture and explain the importance of this developments within its cultural context.

Demonstrate an aesthetic awareness Conceptualism and Activist Art and explain the importance of these developments within its cultural context.

Demonstrate an aesthetic awareness of the artistic style of Minimalism and explain the importance of this developments within its cultural context.

Demonstrate an aesthetic awareness of the artistic style of Post-Modernism and explain the importance of this developments within its cultural context.

Demonstrate an aesthetic awareness of Contemporary Art and Globalization and explain the importance of these developments within their cultural context.

Additional Learning Outcome information
Discuss the development of world relationships involving art thinking.
In addition to the above, students should be able to:

- Contrast basic stylistic changes within different time periods and regions of the world
- Illustrate how techniques were developed in creating modern visual imagery
- Research an area of study and discuss its importance
- Explain various art ideas in relation to the political, philosophical, and religious events of each period

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Quizzes are given throughout the course. Exams are given within the class at measurable intervals. A written final examination based on visual imagery studied throughout the course. A written Research Paper with major points evaluated. Assessing key concepts of the Research Paper within an oral presentation in a group setting.
Texts
See department for required text and course materials.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for ART 123

ART130 - History of Graphic Design

Overview

Subject
Graphic Design

Academic Department
Fine & Performing Arts

School
Liberal Arts

Course Description
Explores design through the ages and the various contexts in which it developed. Studies the evolution of the letter form, the emergence of type and printing, and the history of design and illustration.

Course Pre-requisite(s)
Eligible to take ENG courses at HFC

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
25

Academic Level
Undergraduate

General Education Category
Humanities and Fine Arts

Michigan Transfer Agreement (MTA) Category
Category 5: Humanities and Fine Arts - Applied Degrees, Category 5: Humanities and Fine Arts - Transfer Degrees

Goals, Topics, and Objectives

Course Goals
To help students become better designers by giving them a historical context for their field of study as well as a look at how the field is changing through technology and the growing global design environment.
Core Course Topics

1. Early writing, mark making, the invention of alphabets, and the use of words to communicate through illuminated manuscripts of the Middle Ages to present day.
2. Typographic design from the Renaissance period through contemporary typographic design. Including the invention of printing and typeface design.
3. The use of illustration and photography, and the relationship of both to graphic design.
4. Major periods in the history of graphic design from Renaissance through contemporary design including the influence of the Art movements on graphic design.
5. The digital revolution, screen based media, and its effects on graphic design.
6. International design trends through history and the effect of the global village on design.

Identify and discuss early writing systems and their influences on design today.

Classify major type design styles and their designers.

Recognize illustrative techniques and understand the role of innovation in graphic design.

Classify work and artists from important artistic movements and discuss their relevance to graphic design, including Arts and Crafts, Art Nouveau, Cubism, Futurism, Dada, and the New York School.

Analyze the relevance of important typographic movements and the work of significant graphic designers through history.

Understand the importance of technology and historic influences on design today.

Identify and discuss international trends in design in context of a contemporary design practice.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement

- Class Participation includes discussions and critiques
- Unit tests and final exam
- Research paper or oral report
- Written and designed projects as described in the course syllabus

Texts
Meggs' History of Graphic Design

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for ART 130

ART135 - Art Appreciation

Overview

Subject
Art (Art History)

Academic Department
Fine & Performing Arts

School
Liberal Arts

Course Description
A global survey of the development of visual arts through studying major historic civilizations and cultures from the stone age to the present. Explains technical information on the materials, tools, and techniques used to create visual arts in different branches. Discusses how to interpret works of art by examining the contextual characteristics, the content, functionality and the culture(s) that produced it. Field work at a major museum/art gallery is required to strengthen student's knowledge.

Course Pre-requisite(s)
Eligible to take ENG courses at HFC

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
15

Academic Level
Undergraduate

General Education Category
Humanities and Fine Arts

Michigan Transfer Agreement (MTA) Category
Category 5: Humanities and Fine Arts - Applied Degrees, Category 5: Humanities and Fine Arts - Transfer Degrees

Goals, Topics, and Objectives

Course Goals
This course in art appreciation introduces art techniques and presents a multitude of art imagery in association with explanations.

Core Course Topics

1. Introduction to art
2. Vocabulary of terms
3. Two-dimensional media (drawing, painting, prints, camera art, and graphic design).
4. Three-dimensional media (sculpture, applied arts, architecture).
5. Techniques of art making
6. Artistic styles
7. Arts in time (content of history to art explained timeframe and techniques developed chronologically).

Develop an understanding of what art is along with role art has played throughout the cultural context of human development.
Define and utilize the some of the major terms used in the making, viewing, and understanding art.
Define the similarities and differences between different two-dimensional medial.
Define the similarities and differences between different three dimensional media.
Demonstrate an aesthetic awareness of the development individualistic artistic styles.
Demonstrate an aesthetic awareness of the chronological development of some of the major art trends throughout history and explain the importance each within its cultural context.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement

- Class participation
- Class discussions
- Written essays and/or research paper as determined by the instructor and described in the course syllabus
- Quizzes and/or tests as determined by the instructor and described in the course syllabus
- Possible museum and/or gallery visit as determined by the instructor and described in the course syllabus

Texts
Giberts's Living With Art, Mark Getlein, MaGraw Hill

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for ART 135

ART141 - Ceramics I

Overview

Subject
Art (Art History)

Academic Department
Fine & Performing Arts

School
Liberal Arts

Course Description
A beginning level college course in ceramic materials and processes. Covers various hand-building techniques, basic surface and glazing techniques, and the differences between gas and electric firing. This class meets for six (6) hours a week.

Course Pre-requisite(s)
Eligible to take ENG courses at HFC

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
92

Total Student Contact Hours:
92

Course Fee
125

Academic Level
Undergraduate

Goals, Topics, and Objectives

Course Goals
To provide the beginning construction and glazing skills necessary for a student to design, construct and glaze both challenging and aesthetically pleasing ceramics, and to encourage the development of creative problem solving skills.

Core Course Topics

1. Pinch construction
2. Coil construction
3. Slab construction
4. Mold construction
5. Slip decoration
6. Iron oxide stain decoration
7. High fire glazing
8. Low fire glazing.
9. Ceramic aesthetics
10. Vocabulary

Create a group of pinch constructed pieces utilizing a variety of themes.
Create a thematically based piece utilizing the coil construction technique.
Slab construction Create pieces utilizing both soft slab and stiff slab construction techniques.
Create a ceramic piece utilizing one or more press molds.
Employ colored slips as a decorating vehicle in high fire ceramics.
Employ iron oxide stain as a decorating vehicle in high fire ceramics.
Utilize a variety of high fire glaze techniques on ceramic pieces.
Apply low fire glazing glazes on one or more of ceramic pieces.
Analyze and contrast different themes and construction techniques in one's work and how discuss how these fit into a historical and/or contemporary overview of the media.
Define a basic vocabulary list pertaining to the operation of making and firing ceramics.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement

- Evaluation of hands-on projects.
- Class discussions
- Class participation
- Critiques.
- Written quizzes and/or exams as determined by the instructor and described in the course syllabus

Texts
No "text" required, but students do outside of class research on pottery.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for ART 141

ART142 - Ceramics II

Overview

Subject
Art (Art History)

Academic Department
Fine & Performing Arts

School
Liberal Arts

Course Description
Emphasizes functional pots and the wheel as the primary technique of construction. Introduces the history of functional ceramics as an idea source for functional designs and includes instruction in kiln stacking. This class meets for six (6) hours a week.

Course Pre-requisite(s)
ART141 Ceramics I with a "C" grade or higher, or Instructor Permission

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
92

Total Student Contact Hours:
92

Course Fee
125

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Skilled Demonstration, Portfolio Review

Credit for Prior College Level Learning (CPCLL) Details
Skilled Demonstration Details

Demonstration of live ability to make all the items covered in class to a high skilled level.

Portfolio Review Details

Extensive portfolio of ceramic work done by the individual that covers the work cited in the Course Master

Other Details

Determined by department.

Goals, Topics, and Objectives

Course Goals
To provide the basic skills in developing forms on the potter's wheel necessary for students interested in a possible ceramics emphasis at a four year art program, a career in ceramics or for setting up a home studio, and to encourage creative problem solving skills within the arts.
Core Course Topics

1. Course overview and vocabulary
2. The potter's wheel
3. Tumblers
4. Bowls
5. Trimming
6. Mugs
7. Surface design
8. Glaze mixing
9. Kiln loading
10. Ceramic aesthetics

Develop and understanding and utilization of the vocabulary used to describe the various ways and means of working on a potter's wheel.

Demonstrated the ability to center, open and pull up clay on the potter's wheel.

Create a group of cylindrical tumblers on the potter's wheel

Transform the shape of thrown pieces by trimming a foot on the bottom edge

Create a group of mugs that have functional and aesthetically pleasing handles

Demonstrate proficiency in using slips and glazes to put aesthetically pleasing as well as functional surfaces on pottery.

Demonstrate the ability to use the balance scale and mix a large batch of glaze.

Assist in the stacking of both electric and gas kilns.

Analyze and contrast different themes and construction techniques in one's work and how discuss how these fit into a historical and/or contemporary overview of the media.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement

- Evaluation of hands-on projects.
- Critiques and class discussion.
- Written quizzes.
- Final exam.

Texts
The Complete Potter by Steve Mattison Thomas, Shafer: Pottery Decoration, NewYork, Watson-Guptill The Complete Potter - Throwing by Richard Phethean

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for ART 142

ART150 - Digital Photography I

Overview

Subject
Art (Art History)

Academic Department
Fine & Performing Arts

School
Liberal Arts

Course Description
An introductory-level course on the basics of digital imaging where creativity is emphasized. Offers key concepts such as (manual) camera capture, basic file management, 'non-destructive' image processing, and printing which help foster the foundations for visual communications, new media disciplines, or a fine art practice. A student may wait until the first class meeting to make arrangements to buy/use a camera. This class meets for six (6) hours a week.

Course Pre-requisite(s)
Eligible to take ENG courses at HFC

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
92

Total Student Contact Hours:
92

Course Fee
10

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Portfolio Review, Interview

Credit for Prior College Level Learning (CPCLL) Details
Portfolio Review Details

Portfolio must contain 3-5 pieces of evidence that illustrates competency in all course learning objectives. Department faculty will evaluate submitted portfolios based on the evaluation rubric. Evaluation rubric and student checklist located in Division Office.2. Scheduled interview with the appropriate department faculty.

Interview Details

Interview, given in department-by-department faculty. Faculty will interview applicants based on submitted portfolio and will assess against evaluation rubric. Evaluation rubric and student checklist located in Division Office.

Goals, Topics, and Objectives

Course Goals
Designed to introduce students to the tools and processes for creating and managing digital lens based imagery for print, web, and fine art production.
Core Course Topics

1. Adjustable digital single lens reflex camera
2. Manipulating the exposure with in camera techniques
3. Post-production methods for light-based output ("non-destructive" alterations to the file in order to address aesthetic concerns)
4. Beginning lighting for products
5. Historic and contemporary practices in photography.
6. Design and aesthetic considerations to making/understanding photographic works
7. Communicating the photographic process and aesthetic choices including the students description of their own work, vocabulary.

Demonstrate the ability to use a manual digital camera effectively.

Perform basic techniques for image production from capture to output.

Perform basic non-destructive post production editing.

Demonstrate essential skills in pictorial composition including lighting and still-life techniques.

Analyze key issues in photographic history and contemporary practices.

Demonstrate how to present and speak about his/her photo works effectively including the following elements: file preparation for display, description of the photographic process and methodology, and aesthetic considerations.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement

- Production of photographic projects.
- Produce bracketed images for an HDR rendering as an amalgamated composition.
- Give an oral presentation on a photographer's work.
- Produce and present a final project along with a written project statement.
- Group critiques of assigned photo work.

Texts
Determined by instructor.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for ART 150

ART161 - Darkroom Photography

Overview

Subject
Art (Art History)

Academic Department
Fine & Performing Arts

School
Liberal Arts

Course Description
A beginning college level art class designed to teach the use of an manual 35 mm SLR film camera, development of black & white negatives and the making of black and white prints in the darkroom. If the student does not own a suitable camera prior to taking this class, he/she may wait until the first class meeting prior to purchasing one. Creativity is emphasized. This class meets for six (6) hours a week.

Course Pre-requisite(s)
Eligible to take ENG courses at HFC

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
92

Total Student Contact Hours:
92

Academic Level
Undergraduate

Goals, Topics, and Objectives

Course Goals
Designed to introduce the beginning photography student to basic film and darkroom photographic skills.

Core Course Topics

1. The camera
2. Black and white film
3. The camera's shutter speed control
4. The camera's aperture control
5. Film processing
6. Darkroom
7. The enlarger
8. Darkroom chemistry
9. Contrast filters
10. Darkroom safety
11. Photographic presentation
12. Photographic aesthetics

Demonstrate the functions of and effectively use a SLR (Single Lens Reflex) manual operated film camera .

Demonstrate an understanding and utilization of black and white film as an image recording medium .

Demonstrate a basic knowledge of how speeding up or slowing down the shutter effects the photographic image.

Demonstrate a basic knowledge of how open or closing the camera's lens with the aperture control effects the photographic image.

Demonstrate proper film loading and developing including the proper use and sequence of the chemical developing process.

Understand basic darkroom protocol.

Demonstrate the ability to load film into the enlarger and expose photographic paper for printing.

Demonstrate proper hands on processing techniques of black and white prints through the chemical baths.

Utilize contrast filters on variable contrast photographic paper to change the aesthetic quality of images.

Practice proper darkroom safety techniques when using photographic chemistry.

Employ a mat cutter to properly mat and present photographs.

Analyze, discuss and contrast different themes in one's work and how these fit into historical and/or contemporary ideas of photography.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement

- Class participation
- Class discussions
- Class critiques of student photographs
- Portfolio review
- Quizzes and exams as determined by the instructor that are to be described in the class syllabus

Texts
Determined by instructor

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for ART 161

ART165 - Typography

Overview

Subject
Graphic Design

Academic Department
Fine & Performing Arts

School
Liberal Arts

Course Description
Typography is the art of arranging type to create visually communicated messages. Covers typesetting, and layout design including history, anatomy, and and design fundamentals. Introduces Adobe Illustrator and InDesign. ART-107 is highly suggested prior to taking this course. This class meets for six (6) hours a week.Students are expected to have access to the Adobe Creative Cloud applications including Photoshop, Indesign, and Illustrator.

Course Pre-requisite(s)
Eligible to take ENG courses at HFC ART101 Two Dimensional Design, or Instructor Permission

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
92

Total Student Contact Hours:
92

Course Fee
30

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Portfolio Review, Interview

Credit for Prior College Level Learning (CPCLL) Details
Portfolio Review Details

Provide, in writing, a request to the department. Indicate the rationale for requesting credit and describing the type of college-level learning or course descriptions. Portfolio must contain 3-5 pieces of evidence that illustrates competency in all course learning objectives. Department faculty will evaluate submitted portfolios based on the evaluation rubric. Evaluation rubric and student checklist located in Division Office. Interview with appropriate departmental faculty to discuss the request and work samples.

Interview Details

Interview, given in department by department faculty. Faculty will interview applicants based on submitted portfolio and will assess against evaluation rubric. Evaluation rubric and student checklist located in Division Office.

Other Details

Determined by department.

Goals, Topics, and Objectives

Course Goals
To provide students with knowledge of typography and the principles of layout design and its importance of typography as a tool for communicating visual messages.
Core Course Topics

1. Anatomy of typeface design.
2. Classification of typeface design: Serif (old, transitional, modern), san-serif (humanist, geometric, grotesque), slab serif, script, and display
3. Type setting techniques and best practices.
4. Grid and layout. Construct page layouts based on a grid. Show a variety of grid systems and explain appropriate use for each.
5. Designing for legibility and the communication of intended message
6. Historical and typographic trends. Introduction to periods of designs as well as notable designers and typographers
7. Discuss ways to research historical and typographic trends. Introduce periods of designs as well as notable designers and typographers.

Identify the anatomical parts and measurements of letters.
Classification of typeface design: Serif (old, transitional, modern), san-serif (humanist, geometric, grotesque), slab serif, script, and display.
Classify and sketch type with pencil on paper from each of the major classifications.
Exhibit proper use of typesetting techniques including manual leading, kerning, and various forms of justification.
Construct page layouts based on a grid.
Show a variety of grid systems and explain appropriate use for each.
Experiment with concepts for a design on paper (or digital) and then produce the design using Adobe drawing tools.
Show evidence in their design solutions of an understanding of design concepts and principles such as typographic hierarchy, optical adjustment, visual alignment, and grid systems.
Examine well-known typefaces such as Bodoni, Caslon, Garamond, Helvetica, Garamond, and Universe.
Illustrate and articulate an understanding of typographic trends such as Bauhaus, International Style and experimental typography.
Discuss ways to research historical and typographic trends. Introduce periods of designs as well as notable designers and typographers.

Additional Learning Outcome information

1. Identify the anatomical parts and measurements of letters.
2. Identify and sketch type with pencil on tracing paper from each of the major classifications.
3. Exhibit proper use of typesetting techniques including manual leading, kerning, and various forms of justification.
4. Sketch concepts for a design on tracing paper and then produce the design using Adobe drawing tools.
5. Show evidence in their design solutions of an understanding of design concepts and principles such as typographic hierarchy, optical adjustment, visual alignment, and grid systems.
6. Recognize well-known typefaces such as Bodoni, Caslon, Garamond, Helvetica, Garamond, and Univers.
7. Illustrate and articulate an understanding of typographic trends such as Bauhaus and experimental.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement

- Written and designed projects as described in the course syllabus.
- Class Participation includes discussions and critiques
- Unit tests and final exam as described in the course syllabus.

Texts
Text to be determined by the department/instructor

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for ART 165

ART190 - Co-Op in Graphic Design

Overview

Subject
Art (Art History)

Academic Department
Fine and Performing Arts

School
Liberal Arts

Course Description
Cooperative education is a structured method of combining classroom-based education with practical work experience. A cooperative education experience, commonly known as a "co-op," provides academic credit for structured employment experience. Work experience must be directly related to the student's declared major to be eligible. To register for this course, a student must have completed 50% of core coursework, maintain an overall GPA of 2.0 and a program specific GPA of 2.5. Contact the HFC Career Services Office for more information at careers@hfcc.edu.

Course Pre-requisite(s)
All co-op students must have completed a minimum of 50% of their core classes generating a core grade point average (GPA) of a 2.5 and a minimum overall GPA of 2.0. For more information, please visit careers.hfcc.edu. HFC Career Services Office approval is required.

Credit Hours
1

Total Contact Hours

Total Instructor Contact Hours:
16

Total Student Contact Hours:
16

Academic Level
Undergraduate

Goals, Topics, and Objectives

Course Goals
Cooperative education helps students make the school-to-work transition, develop career and program-related learning objectives, and work on applicable skills for employment. Placements should provide students with the opportunity to apply and expand upon knowledge learned in the classroom, and develop the skills acquired in their coursework to align with the standards and expectations set by the worksite.

Core Course Topics

1. Publication design and layout
    - Construct illustrations and page layouts that align with current industry trends.
2. Workplace etiquette
    - Demonstrate collaborative and polite oral and written communication to meet deadlines.
3. Publication trends
    - Evaluate content and determine appropriate visual communication media.
4. Resume building
    - Generate and edit content for publication.
5. Design software
    - Demonstrate mastery of industry-standard design software.

Publication design and layout: Construct illustrations and page layouts that align with current industry trends.

Workplace etiquette: Demonstrate collaborative and polite oral and written communication to meet deadlines.

Publication trends: Evaluate content and determine appropriate visual communication media.

Resume building: Generate and edit content for publication.

Design software: Demonstrate mastery of industry-standard design software.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment to be determined by the instructor based on the student's academic growth including future employability. It may include, but is not limited to, the following:

Consistent and prompt attendance at worksite Employer evaluation Monthly submissions to the newspaper Participation in career-focused workshop(s)

General Course Requirements and Recommendations
ART190 Co-Op in Graphic Design will provide students interested in careers in graphic design to obtain hands-on experience. The student will be required to attend weekly production meetings.

Texts
NA

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for ART 190

ART213 - Life Drawing II

Overview

Subject
Art (Art History)

Academic Department
Fine & Performing Arts

School
Liberal Arts

Course Description
An intermediate college level exploration Life Drawing through direct observation of a model. This class meets for six (6) hours a week.

Course Pre-requisite(s)
ART113 Life Drawing I or Instructor Permission

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
92

Total Student Contact Hours:
92

Course Fee
40

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Gesture
2. Line quality
3. Measuring
4. Composition
5. Value
6. Foreshortening
7. Anatomy
8. Portraiture
9. Vocabulary
10. Visual Overview

Illustrate the figure in full with quick linear analysis based on energy, movement and rhythm.

Demonstrate techniques of line variation as it pertains to contour, movement, and indications of form and weight.

Apply correct proportions in a drawing by using measurement and sighting methods, including positive/negative space analysis.

Apply measuring and design elements to utilize the ratio of paper size to figure to create harmony between the figure, ground and the predetermined size of the drawing.

Create a body of work that emphasizes understanding of aspects of lighting and shadow on the figure and visually communicates the illusion of 3D form through tonal gradations in charcoal.

Demonstrate competence in measuring and accurately drawing the figure foreshortened, reclining, and turned.

Illustrate the skeleton in full and demonstrate a working knowledge of skeletal proportions, bones and joints.

Illustrate an understanding of the skull, neck, facial planes and features.

Define and utilize vocabulary that relates to college drawing classes and basic anatomy.

Discuss various artists' figurative work. Interpret technique and narrative in figure based compositions.

Interpret technique and narrative in figure based compositions.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
A pre-instruction drawing will be done on the first full day of class to compare with work done at the end of the semester.

- Class Participation
- Class discussions and critiques of student work
- Portfolio review
- Quizzes and/or exams as determined by the instructor and described in the course syllabus

General Course Requirements and Recommendations
This class meets 6 hours a week.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for ART 213

ART214 - Graphic Design Studio 2

Overview

Subject
Graphic Design

Academic Department
Fine & Performing Arts

School
Liberal Arts

Course Description
Builds on skills developed in ART-114. Covers intermediate design solutions for a variety of media including print and digital using the Adobe Creative Software Suite. Focuses on creating materials for brand identity and provides an introduction into User Experience (UX) design. This class meets for six (6) hours a week.Students are expected to have access to the Adobe Creative Cloud applications including Photoshop, Indesign, Illustrator, Acrobat, AfterEffects and XD.

Course Pre-requisite(s)
ART 114 Graphic Design Studio 1 or Instructor Permission

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
92

Total Student Contact Hours:
92

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Portfolio Review, Interview

Credit for Prior College Level Learning (CPCLL) Details
Portfolio Review Details

Provide, in writing, a request to the department. Indicate the rationale for requesting credit and describing the type of college-level learning or course descriptions. Portfolio must contain 3-5 pieces of evidence that illustrates competency in all course learning objectives. Department faculty will evaluate submitted portfolios based on the evaluation rubric. Evaluation rubric and student checklist located in Division Office. Interview with appropriate departmental faculty to discuss the request and work samples.

Interview Details

Interview, given in department by department faculty. Faculty will interview applicants based on submitted portfolio and will assess against evaluation rubric. Evaluation rubric and student checklist located in Division Office.

Other Details

Determined by the department.

Goals, Topics, and Objectives

Core Course Topics

1. Semiotics.
2. Conceptual development.
3. Discuss the importance of recording design process for clients, portfolios and college transfer.
4. Branding and terminology.
5. Work across the Adobe platform to create design solutions.
6. Designing for digital products (UX) and social media.
7. Color Theory and Color Practices
8. Printing, digital output, and PDF formats.
9. Preliminary critiques and revision as part of design methodology.

Interpret and apply symbolism in design strategy.

Employ research, planning, preliminary sketching, and applied color theory in the creation of a design strategy.

Discuss the importance of recording design process for clients, portfolios and college transfer.

Develop a process binder that includes all process work up to and including the final solutions. The process binder would demonstrate the design process from brainstorming techniques, sketching, to the final solution, in a well organized and designed digital package.

Articulate an understanding of design terminology.

Create brand strategy for a defined project.

Work across the Adobe platform to create design solutions.

Manage importing and exporting files for use between software programs.

Evaluate and use appropriate software within the suite for a given application.

Design materials appropriate for digital and mobile interfaces and social media platforms.

Interpret color theory and meaning to apply appropriate color for intended communications.

Select appropriate Pantone colors for print and identity.

Evaluate design strategies which lead to the correct saving and desired output of documents.

Perform self analysis and peer critique.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement

- Projects as described in the course syllabus
- Tests as described in the course syllabus
- Class Participation includes discussions and critiques
- Capstone project which incorporates cross-platform, cross-output considerations

Texts
Text to be determined by the department/instructor

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for ART 214

ART216 - Painting II

Overview

Subject
Art (Art History)

Academic Department
Fine & Performing Arts

School
Liberal Arts

Course Description
An intermediate level college painting class that further explores traditional and contemporary approaches to observational painting. This class meets for six (6) hours a week.

Course Pre-requisite(s)
ART101 Two Dimensional Design, ART102 Drawing I, and ART116 Painting I or Instructor Permission

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
92

Total Student Contact Hours:
92

Course Fee
25

Academic Level
Undergraduate

Goals, Topics, and Objectives

Course Goals
Students in this course will develop an awareness of the advanced concepts, methods, and materials involved in oil painting. Exercises are designed to build upon skills developed in Painting 1 while sharpening these skills through advanced challenges. Emphasis will be placed upon understanding the painting process as a concept of dynamic color/shape relationships.

Core Course Topics

1. Vocabulary
2. Preparation
3. Values
4. Individualize Palettes
5. Traditional Techniques
6. Contemporary Techniques
7. Canvas stretching
8. Copy Masterwork
9. Self-portrait

Demonstrate the ability to successfully apply all assigned vocabulary terms in class discussions.

Demonstrate the ability to maintain an organized palette with all related materials for oil painting.

Demonstrate expertise in describing forms using monochrome value as the principle means of development.

Exhibit an advanced knowledge of how to create a still life image restricted to warm/cool colors.

Demonstrate familiarity with grisaille, glazing, scumbling, and feathering approaches beyond material learned in Painting I.

Demonstrate familiarity with alla prima, impasto, open edge effects, and color blocks interaction beyond material learned in Painting I.

Demonstrated the ability to stretch and prepare canvas on standard stretcher bars.

Demonstrate expertise in copying a masterpiece painting focusing on color, composition, proportion, and the use of abstract color shapes and patterns.

Create a self-portrait with advanced knowledge of composition, color, and proportion.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement

- Class participation
- Class Critiques
- Portfolio review
- Quizzes and/or exams as determined by the instructor that are to be described in course syllabus.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for ART 216

ART221 - Medieval Art

Overview

Subject
Art (Art History)

Academic Department
Fine & Performing Arts

School
Liberal Arts

Course Description
A comprehensive overview of medieval art and architecture from the late antiquity to the late Gothic period in Europe and the Mediterranean region. Discusses the visual art and cultures of about 1000 years (around 400-1400 CE) including Late Roman, Early Christian, Byzantine, Romanesque, Islamic, and Gothic art. Offers diverse perspectives on the development, exchange, interaction, and influence between all these cultures through their visual arts. A field trip to a major museum is required.

Course Pre-requisite(s)
Eligible to take ENG courses at HFC

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Academic Level
Undergraduate

General Education Category
Humanities and Fine Arts

Michigan Transfer Agreement (MTA) Category
Category 5: Humanities and Fine Arts - Applied Degrees, Category 5: Humanities and Fine Arts - Transfer Degrees

Goals, Topics, and Objectives

Course Goals
To develop understanding and appreciation for the different phases of medieval art and architecture as an important cultural period interacted with other major cultures; to explore and comprehend the relationship between the artistic forms of different religious groups; to understand the different architectural structures in relation to the different religious movement in the Mediterranean region. To understand the political interaction between the different phases of Medieval culture and their impact on the art of the Renaissance.

Core Course Topics

1. The Late Antiquity: Introduction to the Early Medieval Period: 100 - 400 CE
2. The Byzantine Empire: 400 - 1543 CE
3. The Early Middle Ages in the West: 200 - 800 CE
4. Medieval Art and Islam 622 - 1400 CE
5. The Romanesque (950-1200)
6. The Late Middle Ages
7. Phases of Medieveal culture
8. Medieval archeticture
9. Religion in Medieval culture
10. Politics in Medieval culture

Identify and explain the art and architectural trends during the Early Medieval Period, 100 - 400 CE.

Identify and explain the artistic trends, styles, and mediums of the various forms of visual arts among the Byzantine Empire, 400 - 1543 CE.

Identify and explain the artistic trends, styles, and mediums of the various forms of visual arts among the Early Middle Ages in the West, 200 - 800 CE.

Identify and explain the artistic trends, styles, and mediums of the various forms of visual expression the Medieval and Islamic worlds, 622 - 1400 CE.

Identify and explain the artistic trends, styles, and mediums of the various forms of visual arts among the Romanesque world, 950 - 1200 CE.

Identify and explain the artistic trends, styles, and mediums of the various forms of visual arts among the Late Middle Ages.

Demonstrate comprehension of the chronological and geographic boundaries of the different phases of medieval culture.

Identify, analyze, and explain the artistic trends, styles, and techniques of the various forms of architectural structures among the different medieval sub-periods.

Examine the iconography and symbolism of the different visual art forms in relation to the religious and ritualistic factors of each specific sub-period and its ramification on the succeeding period.

Distinguish between the exchange, interaction, impact, and influence of the different cultures on medieval European esthetics through the political and cultural contacts.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement

- Class participation
- Class discussions
- Weekly readings and overviews thereof
- Short essays and/or a research paper

- A Detroit Institute of Art visit and tour certain sections related to the Medieval art and materials
- DIA report
- Quizzes and/or Exams as determined by the instructor to be described in the course syllabus

Texts
Contact the Department for a list of required course materials.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for ART 221

ART224 - Art of Islam

Overview

Subject
Art (Art History)

Academic Department
Fine & Performing Arts

School
Liberal Arts

Course Description
Offers a comprehensive study of the history and development of Islamic art and architecture from its birth in the 7th century CE to the present time. Explains basic characteristics of Islamic art as experienced through major architectural monuments, painting, sculpture, ceramic, calligraphy, and other forms of visual art. Discusses the relationship between the theology of Islam as a faith and its arts. A field trip to a major museum is required.

Course Pre-requisite(s)
Eligible to take ENG courses at HFC

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
15

Academic Level
Undergraduate

General Education Category
Humanities and Fine Arts

Michigan Transfer Agreement (MTA) Category
Category 5: Humanities and Fine Arts - Applied Degrees, Category 5: Humanities and Fine Arts - Transfer Degrees

Goals, Topics, and Objectives

Course Goals
The goal of this course to acquaint students with the foundation to fundamental understanding of Islamic art and culture. Students will also learn chronological periods of Islamic art.

Core Course Topics

1. Art and culture of pre-Islamic times in the Arabian Peninsula.
2. Rise and expansion of Islam: early Islamic art.
3. Medieval Islam: stability and conflict, development in style.
4. Islamic Renaissance and decline.
5. Modern Islamic art and society.
6. Identification of Islam art
7. Islamic art in relationship to Islamic culture
8. Muslim rituals in relationship to art and architecture
9. Vocabulary

Demonstrate and aesthetic awareness of the art and culture of pre-Islamic times in the Arabian Peninsula.
Examine and define the rise and expansion of Islam along with the accompanying visual aesthetics.
Examine and define Medieval Islam, and discuss both the stability and conflicts that developed, along with the accompanying visual aesthetics.
Examine and define the Islamic Renaissance, along with it's decline, and explain the accompanying visual aesthetics.
Demonstrate an aesthetic awareness of modern Islamic art, and explain how it fits into contemporary Islamic society.
Identify major architectural monuments and works of Islamic art in painting and calligraphy.
Discuss the foundation of Islamic art and culture and the formation of the distinct characteristics of Islamic art and architecture.
Discuss the relationship between Muslim rituals and certain forms of art and architectural design in the traditional Islamic culture.
Define major vocabulary terms in the field of Islamic art.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement

- Class participation
- Class discussions of material covered
- Class discussions of readings
- Museum trip(s)
- Research paper
- Quizzes and Exams as determined by the instructor and described in the course syllabus

Texts
Text as approved by the department

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for ART 224

ART225 - Asian Art: Art of India & SE Asia

Overview

Subject
Art (Art History)

Academic Department
Fine & Performing Arts

School
Liberal Arts

Course Description
Offers a global view on Asian art, culture, and history by exploring the major monuments, traditions, and civilizations of India, China, Japan, Korea, and Southeast Asia. Covers important Asian artists and historical figures, artistic terms, monuments, sites, and time periods. Discusses art and architecture in terms of historical, social, and religious context. Analyzes and distinguishes various styles of art, and examines how and why certain styles are characteristic of specific times and places.

Course Pre-requisite(s)
Eligible to take ENG courses at HFC

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
15

Academic Level
Undergraduate

General Education Category
Humanities and Fine Arts

Michigan Transfer Agreement (MTA) Category
Category 5: Humanities and Fine Arts - Applied Degrees, Category 5: Humanities and Fine Arts - Transfer Degrees

Goals, Topics, and Objectives

Course Goals
Designed to expose students to the art of India and Southeast Asia, and to learn about outstanding examples of monuments and art works in painting, calligraphy, sculpture, and other forms. The materials in this course present challenges that will inspire students to explore beyond the works and learn about the elements, specialized vocabulary, and historical context of those works. An in-depth understanding of these essential tools will facilitate the interpretation and appreciation of art for all periods and areas.

Core Course Topics

- South and South East Asia before 1200 CE
- China & Korea before 1279 CE
- Japan before 1333 CE
- South and South East Asia 1200-1980
- China & Korea 1279 to 1980
- Japan 1336-1980
- Religious iconography
- Cultural, historical and geographical context
- Cultural iconography
- Recognizition and identification of Asian Art

Demonstrate an aesthetic awareness of the art South and South East Asia prior to 1200 CE and explain it's importance within its cultural context.

Demonstrate an aesthetic awareness of the art China and Korea prior to 1279 CE and explain it's importance within its cultural context.

Demonstrate an aesthetic awareness of the art Japan prior to 1333 CE and explain it's importance within its cultural context.

Demonstrate an aesthetic awareness of the art South and South East Asia from 1200-1980 and explain it's importance within its cultural context.

Demonstrate an aesthetic awareness of the art of China & Korea 1279 to 1980 and explain it's importance within its cultural context.

Demonstrate an aesthetic awareness of the art of Japan 1336-1980 and explain it's importance within its cultural context.

Evaluate the iconography of different visual art forms in relation to the religious and ritualistic trends during the various phases of Asian art.

Recognize and explain the cultural context as well as the historical and geographical framework of major Asian masterpieces.

Categorize and differentiate the iconography and context of the various architectural monuments, their decoration, and the objects used in relation to the rituals performed in different parts of the region.

Recognize and identify the key examples forms, titles, artists, dates, media and locations of the major masterpieces of these areas and time frames.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
The instructor will identify and implement appropriate methods to assess the achievement of the learning objectives for the course. These methods may include objective and essay examinations, as well as out-of-class papers, Internet assignments, and library projects, all of which will be described in the course syllabus.

Texts
Gardner's Art through the Ages: Non Western Perspectives, Fred S. Kleiner, Cengage Learning

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for ART 225

ART226 - African and Afro American Art

Overview

Subject
Art (Art History)

Academic Department
Fine & Performing Arts

School
Liberal Arts

Course Description
Provides a broad overview of the history of visual culture in different regions of continental Africa. Discusses different civilizations, which flourished in different parts of Africa from pre-historic time to the present. Offers study to native spiritual and ritualistic beliefs along with objects associated with and used in these various rituals and involved visual materials such as masks, helmets, costumes, weapons, body art, and other symbolic objects. Discusses African art in the Diaspora with focus on African artists in the Americas and the emerging African American art in North America. A field trip to a major museum is required.

Course Pre-requisite(s)
Eligible to take ENG courses at HFC

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
15

Academic Level
Undergraduate

General Education Category
Humanities and Fine Arts

Michigan Transfer Agreement (MTA) Category
Category 5: Humanities and Fine Arts - Applied Degrees, Category 5: Humanities and Fine Arts - Transfer Degrees

Goals, Topics, and Objectives

Course Goals
To develop an understanding of and appreciation for the different visual forms of African art and architecture as an important historic cultural region and its ramification on the development of African American art. To explore and comprehend the relationship between the artistic forms and objects produced for different spiritual rituals and different religious groups. To understand the interaction between visual materials, ritualistic performance, and architectural space in different traditional African societies. To understand the political interaction between the different phases of African cultures and their impact on the art of African artists in the Diaspora. To understand the formation and development of Modern African American art.

Core Course Topics

1. From the Nile to the Niger: The Sahara and the Maghrib; Lands of the Nile, Egypt, Nubia, and Ethiopia; The Central Sudan; Mande World and the Upper Niger; The Western Sudan
2. Western Africa: West Atlantic Forests; Akan Worlds; The Yoruba and the Fon; The Lower Niger.
3. Central Africa: Crose River, Cameron Grassland and Gaboon; The Western Congo Basin, The Eastern Congo Basin
4. Eastern & Southern Africa: Eastern Africa; Southern Africa
5. The Diaspora: African Artists Abroad. Art of the African Diaspora in the Americas
6. Chronological awareness and Geography
7. Trends, stylistic approaches and mediums used in African Art
8. Rituals, cultural issues, iconography and political factors within African art
9. Influences of Arican art on the Western world
10. Aesthetics of African art

Demonstrate an aesthetic awareness of the art of Africa from the Nile to the Niger, and explain its importance within it's cultural context.

Demonstrate an aesthetic awareness of the art of Western Africa, and explain its importance within it's cultural context.

Demonstrate an aesthetic awareness of the art of Central Africa, and explain its importance within it's cultural context.

Demonstrate an aesthetic awareness of the art of Eastern and Southern Africa, and explain its importance within it's cultural context.

Demonstrate an understanding by comparing and contrasting the relationship between art, rituals, and visual cultures in the different regions of Africa.

Demonstrate an aesthetic awareness of the art of the African Diaspora, and explain its importance within it's cultural context.

Identify and examine the history and development of African art and architecture through the chronological and geographical regions in Africa.

Analyze the artistic trends, styles, and mediums of the various forms of visual arts and architecture among the different traditional African sub-regions and periods.

Demonstrate an understanding of the relationship between art, rituals, and visual cultures in the different regions of Africa and examine the iconography of the different art forms and objects in relation to the religious-ritualistic and political factors of each specific sub-period and its ramification on African art in the Diaspora.

Examine the exchange, interaction, impact, and influence of the different cultures in Africa on European and American modern art.

Recognize, identify, and analyze the iconography, style, and forms of African art and architecture through visual examination, analysis, and reading of related literature.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
The instructor will identify and implement appropriate methods to assess the achievement of the learning objectives for the course. These methods may include objective and essay examinations, as well as out-of-class papers, Internet assignments, and library projects, all of which will be described in the course syllabus.

General Course Requirements and Recommendations
Students will write one long critical research paper for the course along with 2-3 short essay papers on specific topics from the materials of the course. Each student will develop a presentation based on the research paper and present it to the class during the last week of the course. There will be a weekly reading assignment assessed by in class discussion and participation. The whole class will visit the Detroit Institute of Art and tour certain sections related to the African art and materials. The DIA visit is mandatory, and students will meet at the museum on a prearranged day and time. Students may conduct special research project at the African American Museum in Detroit or at a similar institution in the country or abroad.

Texts
Texts determined by department lead instructor

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for ART 226

ART227 - History of Arab Art & Architecture

Overview

Subject
Art (Art History)

Academic Department
Fine & Performing Arts

School
Liberal Arts

Course Description
Presents an overview of the art, architecture, culture, and history of the Arab world. Discusses the history and development of Arab visual art and architecture from around 1000 BCE to the present time. Explains the relationship between the artistic forms of Arab art with different religious and political factors as well as the impact of different cultures on the identity of Arab art. A field trip to a major museum is required.

Course Pre-requisite(s)
Eligible to take ENG courses at HFC

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
15

Academic Level
Undergraduate

General Education Category
Humanities and Fine Arts

Michigan Transfer Agreement (MTA) Category
Category 5: Humanities and Fine Arts - Applied Degrees, Category 5: Humanities and Fine Arts - Transfer Degrees

Goals, Topics, and Objectives

Course Goals
To develop understanding and appreciation for Arab art and architecture as an important cultural trend interacted with other major cultural forces throughout the different periods in the Middle East; to explore and comprehend the relationship between the artistic forms of Arab art and architectural structures in relation to the different religious and political factors as well as the impact of different culture on the identity of Arab art.

Core Course Topics
1. The Early Period in Arab Art, 400 BCE - 400 CE
2. The Middle Period in Arab Art, 400 - 700 CE
3. The Islamic Period in Arab Art, 622 - 1258 CE
4. Arabs in Europe, 700 - 1500
5. Islamic Period, 1258-1914
6. The Modern Era
7. Contemporary Arab Art
8. Arab American Contemporary Art
9. Identification
10. Conceprts of Arab art
11. Iconography of Arab art
12. Arab art across chronological, geographical, political and cultural boundaries

Demonstrate an aesthetic awareness of The Early Period (400 BCE-400 CE) in Arab art including the emergence of the Nabataeans in Palmyra and Petra, the Art of the Early Arabian Mini States such as Petra, Palmyra, Hatra, Kinda, and Hira against the backdrop of the two dominant contemporary empires: The Roman and the Sassanian, as well as early Jewish Arab art from al-Salhiyyah (Dura Europos) in Syria.

Demonstrate an aesthetic awareness of The Middle Period 400-700 CE in Arab art including formation of indigenous Arab art forms in South Arabia, the north west Arabian Peninsula, and the early Christian and Arab art in Syria, Jordan, Iraq and Egypt including an examination of samples of Coptic, Nestorian, Syriac, and other Eastern Christian traditions.

Demonstrate an aesthetic awareness of traditional Islamic art history, beginning in 622 CE, to the fall of Baghdad to the Mongol in 1258 including main Islamic artistic periods of the Ummayads, Abassides, and Fatimites.

Demonstrate and understanding and awareness of the exchange and impact of Arab art on Europe and vice versa through the presence of Arabs in Sicily, southern Italy and Spain, and through the contact caused by the Crusades.

Demonstrate an aesthetic awareness of the Islamic Period, 1258-1914 CE including Mongol domination followed by the Safavids and the Ottomans during times which Arab culture was subject to various cultural impacts from Anatolia, Iran, and central Asia represented by the art of the Saljuqs, Mamluks, Ilkhanites, Timurites, Safavids, and Ottomans.

Demonstrate and aesthetic awareness that colonialism and post colonialism of the Modern Era of Arab art including the European colonization of the Arab world, the establishment of "Modern Arab Art" on the European prototype, the struggle of Arab traditional art against European Modern art and the crisis of Arab Art Identity.

Demonstrate an aesthetic awareness of the Renaissance of Classical Arabic Heritage in Contemporary Arab Art and Architecture including the modern trend in investigating and utilizing classical Arab heritage as a cultural stimulus and visual source of modern aesthetics.

Demonstrate an aesthetic awareness of contemporary art done by Arab Americans as well as Arab American Contemporary Art that is steeped in Arab tradition, and define the similarities and/or differences between the two.

Define the architectural monuments and their functional forms among the Arabs in various periods.

Describe and explain the symbolism and function of different architectural structures in relation to the religious, ritualistic, and social trends during the various phases of Arab history.

Evaluate the iconography of different Arab art forms and stylistic approaches in relationship to the religious and ritualistic trends during the various phases of Arab history as well as categorize and differentiate the iconography and context of the various architectural monuments and their decorative qualities.

Interpret and assess how Arab art and architecture developed through and across chronological and geographical boundaries and evaluate the exchange, interaction, impact, and influence of the different cultures on Arab art and aesthetics through the political and cultural contacts.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
- Class Participation
- Class Discussions
- Essay papers
- A research paper with classroom presentation
- A class visit to the Detroit Institute of Art with an accompanying research paper
- Quizzes and tests to be determined by the instructor and described in the syllabus

General Course Requirements and Recommendations
1. Students will write one long critical research paper for the course along with 2-3 short essay papers on specific topics from the materials of the course.
2. Each student will develop a presentation based on the research paper and present it to the class during the last week of the course.
3. There will be a weekly reading assignment assessed by in class discussion and participation.
4. The whole class will visit the Detroit Institute of Art and tour certain sections related to the Arab art materials. The DIA visit is mandatory, and students will meet at the museum on a prearranged day and time. Students may conduct special research project at different museums that has Arab art materials in Detroit or at a similar institution in the country or abroad.

Texts
The text will be formed as a course pack from different appropriate academic materials.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for ART 227

ART228 - Arabic Calligraphy

Overview

Subject
Art (Art History)

Academic Department
Fine & Performing Arts

School
Liberal Arts

Course Description
Introduces students to the history and development of different styles of Arabic Calligraphy- both traditional and modern. Students will learn the use of the traditional letters writing in the Kufic, Thuluth, Ruq`ah, Diwani, Naskh and modern styles. By the end of the course, students should be able to produce calligraphic compositions of their own by utilizing the rules of measurement and creativity. They will also be able to distinguish between various styles in historical calligraphic monuments. Basic knowledge of the Arabic language is helpful, but not necessary. As a part of this course, students will visit the Detroit Institute of Art.

Course Pre-requisite(s)
Eligible to take ENG courses at HFC

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
10

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Skilled Demonstration, Portfolio Review, Interview

Credit for Prior College Level Learning (CPCLL) Details
Skilled Demonstration Details

Life demonstration, given in department by department faculty. Faculty will assess demonstration based on evaluation rubric (quality and creativity). Evaluation rubric and student checklist located in Division Office.

Portfolio Review Details

Portfolio must contain evidence (samples, images, or copies of students work in calligraphy, and sample of research or articles in the field) that illustrates competency in all course learning objectives. Department faculty will evaluate submitted portfolios based on the evaluation rubric. Evaluation rubric and student checklist located in Division Office.

Interview Details

Interview, given in department-by-department faculty. Faculty will interview applicants based on submitted portfolio and will assess portfolio and demonstration against evaluation rubric. Evaluation rubric and student checklist located in Division Office.

Goals, Topics, and Objectives

Course Goals

- To develop succinct understanding and appreciation to the history and development of Arabic calligraphy since its early phase in the 7th century CE.
- To gain academic knowledge of the development of the various styles of calligraphy through understanding the chronology, political, religious and social development since the 7th century CE.
- To train student with studio practice in the main styles of Arabic calligraphy as a major visual expression in Arabic-Islamic art.
- To understand the historic artistic interaction of Arabic calligraphy with major cultural trends throughout the different periods in the Arab and Islamic world.
- To explore, comprehend and learn the fundamentals of professional classical Calligraphy and their functional use on architectural structures both religious and secular.
- To understand and be able to utilize the use of modern Arabic calligraphy in a creative relationship between the artistic forms of calligraphy and other forms of visual art such as ornamentation on pottery, ceramic tiles, application in Graphic Design, Interior Design and modern architecture.

Core Course Topics

1. Arabic calligraphy and alphabets development and structure
2. Arabic calligraphy styles
3. Monumental works in manuscripts and architectural structures
4. Geometric design, ornamentation, floral composition, and vegetal decoration
5. Zoomorphic calligraphic creation
6. Arabic calligraphy art impact on the art of European Early and High renaissance artists

Describe the history and development of Arabic calligraphy art.
Recognize different calligraphic styles as visual art forms.

Describe the different styles of calligraphy and their chronological development in different architectural structures, manuscripts, and other objects.

Describe the development of the main styles and their variations chronologically.

Produce calligraphy in the following styles: Kufic, Thulth, Naskh, Muhaqqaq, Rayhani, Diwani, Tawqi, Riqah.

Explain the artistic/cultural identity of each specific style and its variations on the aesthetics of the space it occupies in the given region-period.

Apply through practice basic rules of classical Arabic calligraphy in different styles.

Analyze important works of calligraphy chronologically in early manuscripts and important copies of Quran.

Examine calligraphic compositions in both religious and secular buildings such as the Dome of the Rock in Jerusalem, the great mosque of Cordoba and the Al-Hamra complex in Spain, the Taj Mahal in India, Sultan Hasan complex in Cairo, Egypt, Al-Ahmadiyyah mosque in Istanbul, Turkey and others.

Identify masterpieces of historic monumental Arabic calligraphy in various buildings, manuscripts, metal, glass, pottery, jewelry, and woodwork.

Analyze and apply the rules of traditional Arabic calligraphy and its use on various architectural monuments and their decoration in this field.

Explain the symbolism and function of different forms of calligraphy in relation to the religious, ritualistic, and social usage.

Describe and apply ornamentations to calligraphic compositions through the use of traditional decorative vocabularies such as floral, geometric and vegetal units.

Produce creative calligraphic works of art while utilizing modern decorative elements.

Compare and contrast the different artistic trends, styles, techniques and mediums of the various forms of Arabic calligraphy as a visual art.

Analyze zoomorphic calligraphic creations such as human figure, animals, birds, and other objects in calligraphic composition.

Identify the choice of the proper text in creating zoomorphic calligraphic design.

Describe the spread of Arabic calligraphy and its impact on the work of European artists during the early and high Renaissance, especially in Italy during the 14th - 16th centuries.

Analyze important sample of such impact in works of painting and sculpture that depicts Biblical narratives, religious figures, and Christian icons from that period.

Explain the exchange, interaction, impact, and influence of Arabic calligraphy on the other contemporary cultures.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement

- Class participation
- Class discussions
- student portfolio of calligraphic compositions
- Student essays and/or research project
- DIA visit and corresponding report
- Quizzes and/or exams as determined by the instructor and described in the course syllabus

Texts
Determined by the instructor.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for ART 228

ART229 - Survey of Contemporary Art

Overview

Subject
Art (Art History)

Academic Department
Fine & Performing Arts

School
Liberal Arts

Course Description
A global survey of major trends in visual art since the end of the Modern era. Examines the evolution of visual exploration and expression since the middle of the twentieth century and the impact it has manifested on contemporary society worldwide. Students will be encouraged to comprehend the context of contemporary trends and consider the artists' roles as image-makers in today's globally connected world. A field trip to a major museum, or other appropriate art site, is required.

Course Pre-requisite(s)
Eligible to take ENG courses at HFC

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
10

Academic Level
Undergraduate

General Education Category
Humanities and Fine Arts

Michigan Transfer Agreement (MTA) Category
Category 5: Humanities and Fine Arts - Applied Degrees, Category 5: Humanities and Fine Arts - Transfer Degrees

Goals, Topics, and Objectives

Course Goals

- An exploration and analysis towards learning and comprehending the fundamentals of various styles, methods and presentations of contemporary art in Post-Modern culture.
- To encourage students to develop personal visual approaches in creating contemporary artwork within the 21st century society.

Core Course Topics

1. What is Contemporary Art
2. Pluralities in Contemporary Art
3. Cross cultural influencs on Contemporary Art
4. Discovering the Contemporary
5. Appropriation and its Consequences: Power on Display, Space and Action
6. Back to the Easel: Neo-Expressionism and the Return of Painting
7. Memory and History
8. Culture, Body and the Self
9. Global Contemporary Art

Demonstrate an understanding, awareness and appreciation to the history and development of contemporary art since the middle of the twentieth century.

Demonstrate an academic knowledge of the development of the various trends within Contemporary art through understanding the chronology, political, religious and social development globally.

Understand the historic artistic interaction of contemporary art trends with major cultural developments throughout the world during the contemporary era.

Describe the history and development of Contemporary art. Recognize different trends and styles.

Describe the different styles: Minimalism, Process Art, Environmental art, Institutional Critique, African American Critique, Feminist Statement.

Explain appropriation theory. Include the dates when it became a major strategy for contemporary artists, and explain why it did from a historical perspective.

Identify artworks in this area and explain how they deploy appropriation.

Analyze the new approach in painting in the United States, Italy, Germany, and other countries.

Examine and understand the essence of "Art in the Community" and the "Mass Media".

Understand the concept of "Commodities and Consumerism" worldwide.

Describe the trend of memorializing wars, African American History, and visual documentation of civil wars. Analyze major monuments worldwide.

Understand the artist utilization of the self and body as form and content, the body as social medium, and personal life and artistic practice.

Describe the spread of contemporary art abroad to places such as Russia, China, Cuba, Iran, Japan, and the Middle East. Understand the New Metaphors and New Narratives in painting, sculpture.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement

- Class discussions
- Class participation
- At least one museum visit
- Assessment of Academic Achievement will be identified and implemented by the class instructor. Methods may include written tests and essay examinations, out-of-class papers, Internet assignments, library/museum projects, etc. These criteria will be thoroughly outlined and described in the course syllabus.

Texts
Determined by the instructor. Present suggested text is: Kalb, Peter R., ART SINCE 1980 Charting the Contemporary, Brandeis University

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for ART 229

ART242 - Ceramics III

Overview

Subject
Art (Art History)

Academic Department
Fine & Performing Arts

School
Liberal Arts

Course Description
An intermediate level course stressing refinement of ceramic construction techniques and design, primarily through utilitarian objects. This class also offers the opportunity for individual exploration of ceramic glaze and surface possibilities. This class meets for six (6) hours a week.

Course Pre-requisite(s)
ART142 Ceramics II with a "C" grade or higher, or Instructor Permission

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
92

Total Student Contact Hours:
92

Course Fee
125

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Skilled Demonstration, Portfolio Review, Other

Credit for Prior College Level Learning (CPCLL) Details
Skilled Demonstration Details

Live demonstration of all topics covered in the Course Master at a highly skilled level

Portfolio Review Details

An extensive portfolio that includes examples of work in all areas covered by the Course Master at a highly skilled level

Goals, Topics, and Objectives

Course Goals
To refine the student's skills needed to design, construct and fire aesthetically pleasing ceramics that could could be marketable, and to encourage the development of creative problem solving skills.
Core Course Topics

1. Mugs
2. Lidded Containers
3. Plates and Platters
4. Cooking container
5. Individual research
6. Personal aesthetics
7. Kiln loading
8. Glaze mixing
9. Glaze testing

Create and refine a group of mugs with handles.

Construct three different type of lids.

Construct a set of plates and large platter.

Construct a casserole for oven use.

Develop and project organized around a personal stylistic interest.

Apply glazes in the development of a personal style or aesthetic.

Assist in loading both electric and gas kilns.

Utilize the tri-beam scale and keep at least one of the class glazes mixed throughout the semester.

Formulate ceramic chemistry in the development of a new glaze.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement

- Evaluation hands-on projects
- Critiques and class discussion
- Written test

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for ART 242

ART245 - Interactive Experience Design

Overview

Subject
Graphic Design

Academic Department
Fine & Performing Arts

School
Liberal Arts

Course Description
To provide students with the knowledge and skills needed for work in the field of experience design. Introduces User Interface (UI) and User Experience (UX) Design developing an understanding of basic design principles used in the creation of web and application-based communications. Through assigned projects, students will understand the nature of user interface design while the role of the user is introduced. To provide students with the ability to evaluate and apply design thinking process and systems to user experience design. This class meets for six (6) hours a week.

Course Pre-requisite(s)
Eligible to take ENG courses at HFC. ART107 Photoshop, ART114 Graphic Design Studio 1 or instructor permission. ART165 Typography and ART214 Graphic Design Studio 2 highly suggested.

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
92

Total Student Contact Hours:
92

Course Fee
30

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Portfolio Review, Interview

Credit for Prior College Level Learning (CPCLL) Details
Portfolio Review Details

Provide, in writing, a request to the department. Indicate the rationale for requesting credit and describing the type of college-level learning or course descriptions. Portfolio must contain 3-5 pieces of evidence that illustrates competency in all course learning objectives. Department faculty will evaluate submitted portfolios based on the evaluation rubric. Evaluation rubric and student checklist located in School of Liberal Arts Office. Interview with appropriate departmental faculty to discuss the request and work samples.

Interview Details

Interview, given in department by department faculty. Faculty will interview applicants based on submitted portfolio and will assess against evaluation rubric. Evaluation rubric and student checklist located in Division Office.

Goals, Topics, and Objectives

Course Goals
To provide students with the ability to evaluate and apply design thinking process and systems to user experience design.
Core Course Topics

1. Introduction to User Experience Design (UX) and the role of Human Centered Design (HCD) as well as the role of empathy in creating successful user experiences.
2. Design Thinking - Empathize and Define the Problem. This includes research, agile process and tools used for defining the problem
3. UX Deliverables
4. Introduction to User Interface (UI) Design - Ideate and Prototype. Includes the heuristics of design, accessibility, low-fidelity prototyping as a way to rapidly solve design problems
5. Design Thinking - Ideate and Prototype. Discuss high-fidelity prototypes, tools and visual design considerations
6. Creating a UX case study including writing and storytelling as a method to build an engaging case study. Tools for creating a case study.

Explain User Experience Design in using appropriate terminology and theories.

Apply the theories of user experience design to the process of designing interactive experiences.

Understand and choose design solutions that empathize with the users response type and emotion.

Empathize and Define the Problem. This includes research, agile process and tools used for defining the problem.

Complete a variety of research tools including but not limited to personas, interviews, journey maps to investigate solutions.

Understand each deliverable - including but not limited to Research: personas, story boards, journey map; Ideation: brainstorming, user flow; Prototyping: sitemaps, low-fidelity prototype, high-fidelity prototype, interactive prototypes and evaluation.

Employ the use of deliverables in the design process.

Students will apply the heuristics of design to create a low fidelity prototype.

Evaluate low-fidelity prototype feedback to revise and define the problem.

Discuss high-fidelity prototypes, tools and visual design considerations.

Use prototyping tools to create a high-fidelity prototype.

Creating a UX case study including writing and storytelling as a method to build an engaging case study.

Illustrate the user experience process and prototype to create a case study.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement

- Midterm and Final
- Projects as described in the course syllabus
- Class Participation includes discussions and critiques
- Completion of capstone project

Texts
To be determined by instructor.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for ART 245

ART250 - Digital Photography II

Overview

Subject
Art (Art History)

Academic Department
Fine & Performing Arts

School
Liberal Arts

Course Description
Emphasizes how to refine lighting and post-production techniques. Expands on the concept of aesthetics for seeing, thinking, constructing, and manipulating various photographic forms and meanings. This class meets for six (6) hours a week.

Course Pre-requisite(s)
ART150 Digital Photography I

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
92

Total Student Contact Hours:
92

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Portfolio Review, Interview

Credit for Prior College Level Learning (CPCLL) Details
Portfolio Review Details

Provide, in writing, a request to the department. Indicate the rationale for requesting credit and describing the type of college-level learning or course descriptions. Portfolio must contain 3-5 pieces of evidence that illustrates competency in all course learning objectives. Department faculty will evaluate submitted portfolios based on the evaluation rubric. Evaluation rubric and student checklist located in Division Office. Interview with appropriate departmental faculty to discuss the request and work samples.

Interview Details

Interview, given in department-by-department faculty. Faculty will interview applicants based on submitted portfolio and will assess against evaluation rubric. Evaluation rubric and student checklist located in Division Office.

Goals, Topics, and Objectives

Course Goals
Designed to expand a student's knowledge and photographic training in preparation for creating lens-based imagery in professional applications.
Core Course Topics

1. Advanced use of digital single lens reflex camera.
2. Advanced 'non-destructive' image processing.
3. Producing and selecting images from a large body of work.
4. Intermediate lighting techniques with 1-point and 2-point lighting scenarios.
5. Survey of photography both contemporary and historic with emphasis on discussing formal qualities and methods, for use and critique.
6. Presenting of large bodies of work.

Demonstrate the proper use of the manual camera settings accounting for light temperature, light sources, and types of lighting.
Perform image processing techniques at a level acceptable for industry employment.
Demonstrate refined skills in selecting and editing imagery.
Apply knowledge of contemporary and historic photography by presenting of a series of photo works.
Critique photo works using learned criteria.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Photographic projects:

- A series of 20 sequenced lens based works.
- Presentation with successful image sequencing for the images final form (ex. book format, work portfolio for website, etc.).
- A series of photographs using controlled lighting sources such as: continuous artificial light (tungsten) is employed, discontinuous artificial light (strobe/flash), and mixed lighting is used.
- Completion of an application for a professional exhibition.
- Images prepared for the student gallery show.

Texts
A Short Course in Digital Photography, by London & Stone

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for ART 250

ART255 - Time Based Graphics

Overview

Subject
Graphic Design

Academic Department
Fine & Performing Arts

School
Liberal Arts

Course Description
Plan and produce time based graphics from conceptual storyboard through final digital output. Focus on is on motion graphics however these skills can be applied to 2D animation as well. This class meets for six (6) hours a week.

Course Pre-requisite(s)
Successful completion of ART107 Photoshop and ART114 Graphic Design Studio 1 are required. ART165 Typography is strongly encouraged.

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
92

Total Student Contact Hours:
92

Course Fee
30

Academic Level
Undergraduate

Goals, Topics, and Objectives

Course Goals
The goal of this course is to teach students the basic skills and knowledge they will need to create and produce time-based media (motion graphics).

Core Course Topics
1. Introduction to motion graphics for use in the design industry.
2. History of animation and notable designers and animators in the field.
3. Drawing techniques for animated communications.
4. Design for motion-typography and color.
5. Creating artwork for time based communications.
6. Introduction to Adobe After Effects and its use in motion graphics. Saving conventions and rendering of videos.

Evaluate various purposes and styles of motion graphics.

Evaluate important animators and events in the history of animation as a basis for understanding time based communications.

Design for motion-typography and color.

Construct typography for static and kinetic motion.

Decide appropriate color schemes for topic relevance and computer display.

Assess the proper artwork creation method for defined motion projects.

Saving conventions and rendering of videos.

Use basic AfterEffects tools effectively.

Construct animated sequences using Adobe After Effects.

Demonstrate the appropriate method for saving animations and the rendering of videos.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
- Assigned animation projects as described in the course syllabus
- Class Participation includes discussions and critiques
- Tests as described in the course syllabus

Texts
None

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for ART 255

ART261 - Darkroom Photography II

Overview

Subject
Art (Art History)

Academic Department
Fine & Performing Arts

School
Liberal Arts

Course Description
Emphasizes how to refine darkroom techniques and the aesthetics of the photographic experience.

Course Pre-requisite(s)
ART161 Darkroom Photography

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
92

Total Student Contact Hours:
92

Academic Level
Undergraduate

Goals, Topics, and Objectives

Course Goals
Designed to further extend the student's photoskills.

Core Course Topics
1. Use of adjustable film-based camera.
2. Assignments based on controlled lighting.
3. Assignments designed for the student to organize and produce large bodies of work.
4. Hands-on processing of black and white film.
5. Hands-on processing of black and white prints in the darkroom.
6. Design and aesthetic considerations appropriate to making/understanding photographic works.
7. Group critiquing of the produced photoworks.
8. Presentation of large bodies of work.
9. Research skills - how to use the library, Internet and gallery/museum field trips.

Use an adjustable still-film-based camera effectively. Perform film processing techniques successfully.

Perform film processing techniques successfully.

Produce high-quality black & white prints.

Expand/refine skills in pictorial composition.

Present a series of photoworks effectively.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Photographic projects

Produce a series of 20 sequenced photoworks.
- Emphasis of this series should be on the photographic aspect.
- Method of presentation should control the sequencing aspect (ex.: book format).

Produce a series of 20 photographs using controlled lighting.
- Continuous artificial light (tungsten) is employed.
- Discontinuous artificial light (strobe) is also used.
- Subject variation encouraged.

Produce a series of 20 photographs of choice.
- Student required to present written statement of theme before starting work.
- Emphasis on photographic aspect of work.
- Appropriate presentation of work (ex. matted prints)

Texts
A Short Course in Photography, by London & Stone

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for ART 261

ART265 - Illustration

Overview

Subject
Graphic Design

Academic Department
Fine & Performing Arts

School
Liberal Arts

Course Description
Emphasizes digital drawing and painting techniques used by illustrators to create commercial illustrations for print and digital media. Presents effective techniques when using Adobe Photoshop and Illustrator. This class meets for six (6) hours a week.

Course Pre-requisite(s)
Eligible to take ENG courses at HFC, ART102 Drawing I ART107 Photoshop, or Instructor Permission

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
92

Total Student Contact Hours:
92

Course Fee
30

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Portfolio Review, Interview

Credit for Prior College Level Learning (CPCLL) Details
Portfolio Review Details

Provide, in writing, a request to the department. Indicate the rationale for requesting credit and describing the type of college-level learning or course descriptions. Portfolio must contain 3-5 pieces of evidence that illustrates competency in all course learning objectives. Department faculty will evaluate submitted portfolios based on the evaluation rubric. Evaluation rubric and student checklist located in School of Liberal Arts Office. Interview with appropriate departmental faculty to discuss the request and work samples.

Interview Details

Interview, given in department-by-department faculty. Faculty will interview applicants based on submitted portfolio and will assess against evaluation rubric. Evaluation rubric and student checklist located in School of Liberal Arts Office.

Goals, Topics, and Objectives

Core Course Topics

1. Concept development including brainstorming, thumbnail sketching, and conceptual sketching for illustration.
2. Discuss well known illustrators, techniques, and the distinction between fine art and illustration.
3. Finding and using photographs as inspiration and reference. Discuss usage and copyright in the art process.
4. Using Photoshop painting tools in to create painterly digital illustrations.
5. Vector illustration techniques using Abode Illustrator including Bezier pen tool, shape building and pathfinder tools, gradient/blend modes mesh and texture.
6. Presentation of illustrations including saving files for print, matting and digital submission.

Develop illustration concept on paper, scan or photograph, use it sketch to create a finished illustration.
Discuss well known illustrators, techniques, and the distinction between fine art and illustration.
Evaluate the work of some important illustrators. Interpret professional techniques and styles of illustrations.
Interpret professional techniques and styles of illustrations.
Finding and using photographs as inspiration and reference.
Discuss usage and copyright in the art process.
Appraise inspirational images and save for future reference.
Assemble images as a basis for illustration without breaking usage laws.
Experiment and implement Photoshop painting tools to create painterly illustrations.
Manage the Bezier pen tool in Adobe Illustrator to construct complex shapes.
Use gradients and fills to modify complex objects in Illustrator.
Present finished illustrations in a professional manner.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement

- Evaluation of illustration assignments
- Test as described in the course syllabus
- Class Participation includes discussions and critiques

Texts
Text to be determined by the department/instructor.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for ART 265

ART272 - Design Entrepreneur

Overview

Subject
Graphic Design

Academic Department
Fine & Performing Arts

School
Liberal Arts

Course Description
This course is designed to help the individual navigate the business of design. Explores the fundamentals of design management, creative problem-solving techniques, and interpersonal skills for a beginning design entrepreneur who is building a client base.

Course Pre-requisite(s)
ART214 Graphic Design Studio 2

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Departmental Exam, Portfolio Review

Credit for Prior College Level Learning (CPCLL) Details
Departmental Exam Details

Portfolio Review Details Provide, in writing, a request to the department. Indicate the rationale for requesting credit and describing the type of college-level learning or course descriptions. Portfolio must contain 3-5 pieces of evidence that illustrates competency in all course learning objectives. Department faculty will evaluate submitted portfolios based on the evaluation rubric. Evaluation rubric and student checklist located in The School of Liberal Arts office. Interview with appropriate departmental faculty to discuss the request and work samples.

Interview Details Interview, given in department by department faculty. Faculty will interview applicants based on submitted portfolio and will assess against evaluation rubric. Evaluation rubric and student checklist located in The School of Liberal Arts office.

Other Exam Details

Determined by department.

Goals, Topics, and Objectives

Core Course Topics

1. Business Model- Not just freelancing, building a business.
2. Networking-projecting a professional image.
3. Assessing the business needs of a client.
4. Creating a preliminary design pitch.
5. Team work and communicating effectively for building business relationships.
6. Contracts and Project Pricing Strategies

Create a personal brand identity and professional direction.

Explore networking avenues and create content for both in real life and online networking.

Evaluate social media platforms for best practice scenarios.

Analyze and evaluate the communication needs of clients and creating or responding to design brief.

Implement brainstorming techniques.

Develop and deliver a winning presentation for design projects using appropriate digital tools.

Write effective communications for business.

Understand non-verbal communications.

Estimate time, expenses and project scope to develop profit strategy.

Differentiate between various pricing strategies and develop appropriate tactics to receive fair compensation.

Evaluate business documents including estimates, invoices and contracts.

Learn how to protect the business from common pitfalls that plague individual business owners.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Course work includes, but is not limited to:
• Exercises
• Midterm Project or Exam
• Projects
• Final

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for ART 272

ART273 - Studio Art Capstone

Overview

Subject
Art (Art History)

Academic Department
Fine & Performing Arts

School
Liberal Arts

Course Description
A capstone class for graduating Studio Art majors to be taken during their final semester that includes portfolio and Exit Exhibition preparation and implementation.

Course Pre-requisite(s)
Instructor permission

Credit Hours
1

Total Contact Hours

Total Instructor Contact Hours:
16

Total Student Contact Hours:
16

Academic Level
Undergraduate

Goals, Topics, and Objectives

Course Goals
This is a capstone class for all Studio Art majors. The class will emphasize putting together a portfolio of one's work, writing an artist statement, as well as preparation and hanging of their portion of the Art and Design Students' Graduating Exit Exhibition.
Core Course Topics

1. Preparing one's portfolio
2. Photographing artwork
3. Exit Exhibition preparation
4. Mat cutting
5. Public relations
6. Artist statement
7. Exit Exhibition

Select work that should be included in a professional portfolio.

Photograph art work for inclusion in a professional portfolio.

Evaluate one's art work for inclusion in Exit Exhibition.

Measure and cut mats for any two dimensional pieces that require mats.

Design a PR card and/or flier for Exit Exhibition.

Write an artist statement about one's own work.

Organize and hang Exit Exhibition.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement

- Class Participation
- Portfolio Organization
- Exit Exhibition
- Any additional Assessment of Academic Achievement will be identified and implemented by the class instructor and included in the course syllabus.

General Course Requirements and Recommendations
Must be taken during final semester prior to graduation.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for ART 273

ART275 - Advanced Projects

Overview

Subject
Graphic Design

Academic Department
Fine & Performing Arts

School
Liberal Arts

Course Description
This is a capstone course for Digital and Graphic Arts students to prepare their work for both portfolio and graduating student exhibition. The business of design is also introduced. This class meets for three (3) hours once a week.

Course Pre-requisite(s)
Instructor Permission

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
30

Academic Level
Undergraduate

General Education Category
Computer Technology

Goals, Topics, and Objectives

Core Course Topics

1. How to navigate the job market through professional social marketing sites and self-promotion websites.
2. Exhibition of Student Work
3. How to develop and present digital and graphic arts portfolios.
4. Reinforced typography and its use in print and screen based media.
5. Exhibition of art work.
6. How to develop and present graphic design portfolios
7. Professional business practices using standard computer tools.
8. The Graphic Designer as a business professional.

Create online presence using professional networking sites such as Behance and LinkedIn.

Create a complete job application packet including artist statement, employment letter, resume, and portfolio.

Select and prepare student work for gallery capstone exhibition and digital presentation including the use of presentation software.

Evaluate, curate and prepare accumulated students projects for presentation.

Demonstrate facility in reinforced typography by designing and producing a professional resume using developed business stationary and word processing software, appropriate to the concentration.

Select and prepare personal works for both live and digital presentation including the use of presentation software.

Evaluate and prepare accumulated students projects for capstone exhibition.

Demonstrate Computer Literacy knowledge by successfully being able to: Log in and out of the HFC network, utilize Academic Computing Services (ACS), and WebAdvisor.

Operate basic PC hardware, including common input, output, and storage devices.

Utilize an operating system to perform basic tasks, such as finding, saving, copying, and printing files.

Send and receive e-mail, including attachments.

Utilize a browser for Internet access, use search engines, identify appropriate search terms and use a search engine effectively, and evaluate the credibility and quality of information on WWW sites.

Communicate professionally in an online environment.

Demonstrate proper ethical and legal behavior in online environment including common threats to computer security and privacy, such as plagiarism, viruses, phishing, and identity theft.

Evaluate social media platforms for best practice scenarios.

Create a personal brand identity and professional direction.

Analyze and evaluate the communication needs of clients and creating or responding to design brief. Develop production plan for a hypothetical project that ranges from conception to production.

Develop production plan for a hypothetical project that ranges from conception to production.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement

- Assigned projects as described in the course syllabus
- Gallery exhibition
- Portfolio review
- Class Participation includes discussions and critiques

Texts
The AIGA Guide to Careers in Graphic & Communication Design, Juliette Cezzar

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for ART 275

ART2913 - Directed Study in Painting

Overview

Subject
Art (Art History)

Academic Department
Fine & Performing Arts

School
Liberal Arts

Course Description
An individualized, advanced-level course conducted under the direction of a faculty member who, together with the student, designs the format of the study or the project. Students requesting directed study will have completed the appropriate sequence of courses offered by the department.

Course Pre-requisite(s)
ART116 Painting I, ART216 Painting II, and Instructor Permission

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
21

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
Determined by department.

Goals, Topics, and Objectives

Core Course Topics

1. Topics will be determined through an assessment of the student's current skill and competency levels in the media and an evaluation of the student's written statement of work intention.

Analyze and conduct in-depth research in the development and conceptualization of self-directed topic or project.

Illustrate organizational skills through assessment of topic/project needs and a creation of a written timeline for the evolution of the self-directed project from its inception through successful completion.

Effectively utilize resources and academic research in the pursuit of ascertaining solutions to issues related to self-directed topic or project.

Exhibit proficiency in written, oral, visual, and graphic presentation of self-directed topic or project.

Additional objectives will be determined based on needs of each individual student's selected course of study.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement

- Evaluation of written statement of work intention
- Academic research
- Assignments/critiques
- On-line and/or on-campus attendance
- Final presentation

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for ART 2913

ART2933 - Directed Study in Drawing

Overview

Subject
Art (Art History)

Academic Department
Fine & Performing Arts

School
Liberal Arts

Course Description
An individualized advance-level course study of a topic or project under the direction of a faculty member who, together with the student, designs the format of the study or project. Students requesting directed study will have completed the appropriate sequence of courses offered by the department.

Course Pre-requisite(s)
ART102 Drawing I, ART112 Drawing II,ART113 Life Drawing I, ART213 Life Drawing II, ART-115, and Instructor Permission

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
50

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
Determined by department.

Goals, Topics, and Objectives

Core Course Topics

1. Demonstrate an ability to critically analyze and conduct in-depth research in the development and conceptualization of self-directed topic or project.
2. Illustrate organizational skills through assessment of topic/project needs and a creation of a written timeline for the evolution of the self-directed project from its inception through successful completion.
3. Effectively utilize resources and academic research in the pursuit of ascertaining solutions to issues related to self-directed topic or project.
4. Exhibit proficiency in written, oral, visual and graphic presentation of self-directed topic or project.
5. Additional objectives will be determined based on needs of each individual student's selected course of study.

Demonstrate an ability to critically analyze and conduct in-depth research in the development and conceptualization of self-directed topic or project.

Illustrate organizational skills through assessment of topic/project needs and a creation of a written timeline for the evolution of the self-directed project from its inception through successful completion.

Effectively utilize resources and academic research in the pursuit of ascertaining solutions to issues related to self-directed topic or project.

Exhibit proficiency in written, oral, visual and graphic presentation of self-directed topic or project.

Additional objectives will be determined based on needs of each individual student's selected course of study.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement

- Evaluation of written statement of work intention
- Academic research
- Assignments/critiques
- On-line and/or on-campus attendance
- Final presentation

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for ART 2933

ART2936 - Topics in Studio Art

Overview

Subject
Art (Art History)

Academic Department
Fine & Performing Arts

School
Liberal Arts

Course Description
Provides special study in the area of studio art organized by discipline or other criteria. Specific topics and any prerequisites are listed in the current semesters class schedule or may be obtained through the departmental office. This class meets for six (6) hours a week.

Course Pre-requisite(s)
Instructor Permission

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
92

Total Student Contact Hours:
92

Course Fee
75

Academic Level
Undergraduate

Goals, Topics, and Objectives

Course Goals
Students will be engaged in a focused appraisal of specific topics not touched on or only lightly covered in other studio classes. This approach will allow students the opportunity for special, in-depth study rather than an overview of subject matter.

Core Course Topics

1. Upon the selection of a given course topic, a course syllabus will be developed to include all the facets of a normal course master including Topics, Learning Outcomes, and Assessment.

Upon the selection of a given course topic, a course syllabus will be developed to include Core Course Topics and Course Learning Objectives .

The course syllabus will be reviewed by art faculty, and upon approval, submitted to Department of Fine and Performing Arts and the School of Liberal Arts ILT for information purposes.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Appropriate methods of evaluation of student success will vary from topic to topic, and they should be determined by the individual instructor depending on the specific topic selected.

General Course Requirements and Recommendations
To be determined by the instructor

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for ART 2936

ART2953 - Advanced Study in Ceramics

Overview

Subject
Art (Art History)

Academic Department
Fine & Performing Arts

School
Liberal Arts

Course Description
An individualized advanced-level course study of a topic or project under the direction of a faculty member who, together with the student, designs the format of the study or project. Must have completed the appropriate sequence of courses offered by the department. This class meets for six (6) hours a week.

Course Pre-requisite(s)
Instructor Permission

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
92

Total Student Contact Hours:
92

Course Fee
125

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Topics will be determined through an assessment of the student's current skill and competency levels in the media, and an evaluation of the student's written statement of work intention.

Demonstrate an ability to critically analyze and conduct in-depth research in the development and conceptualization of self-directed topic or project.

Illustrate organizational skills through assessment of topic/project needs and a creation of a written timeline for the evolution of the self-directed project from its inception through successful completion.

Effectively utilize resources and academic research in the pursuit of ascertaining solutions to issues related to self-directed topic or project.

Additional objectives will be determined based on needs of each individual student's selected course of study.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement

- Evaluation of written statement of work intention
- Academic research
- Assignments/critiques
- On-line and/or on-campus attendance
- Final presentation

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for ART 2953

ASL130 - Deaf Culture and the Deaf Community

Overview

Subject
American Sign Language

Academic Department
Language Studies

School
Liberal Arts

Course Description
Introduces the Deaf culture and the Deaf community, focusing on its history, traditions, values, and characteristics. Provides a survey of Sign language structure, history, and usage, as well as information about the contributions of Deaf persons to American society.

Course Pre-requisite(s)
ENG094 ALP: Reading and Writing/ENG095E ALP for ELL:Reading & Writing eligible or instructor permission

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
10

Academic Level
Undergraduate

General Education Category
Social Sciences

Goals, Topics, and Objectives

Course Goals
ASL130 Deaf Culture & the Deaf Comm is designed to increase students' knowledge of, and experience with, the Deaf culture and the Deaf community, introducing students to the Deaf community as a linguistic and cultural minority and its role in the larger society.

Core Course Topics

1. Membership in Deaf culture/community
2. Deaf vs. mainstream American culture
3. History of American Sign Language
4. History of Deaf culture
5. Historical and contemporary issues of Deaf culture/community
6. Local Deaf community
7. Interacting with the Deaf community
8. Deaf culture
9. Contributions of Deaf Americans
10. Terminology and technology used by the Deaf

Identify criteria for membership in Deaf culture/community.

Compare and contrast American mainstream culture with Deaf culture.

Demonstrate knowledge of the history of American Sign Languages and its roots in Old French Sign Language.

Describe social, educational, and cultural changes in local, national, and international Deaf culture.

Demonstrate knowledge of the historical and contemporary issues that impact the Deaf culture and the Deaf community.

Apply cultural knowledge of Deaf culture to the local Deaf community.

Describe the impact of Deaf culture as it relates to the roles of various professionals interacting with deaf groups and members of the Deaf community.

Analyze aspects of Deaf culture (behavior, values, beliefs, and etiquette) that differ from the student's own culture, giving specific examples that illustrate these differences

Identify significant contributions made by Deaf Americans to American society.

Identify current terminology and technology used by the Deaf.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of academic achievement will be identified and implemented by the class instructor. Methods will include, but not be limited to:

- Participation
- Weekly/regular quizzes
- Homework assignments
- Chapter/unit tests
- Midterm/final exam

Texts
All sections of this level will use a textbook (and any accompanying materials) selected by the course coordinator and approved by the World Languages Committee.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for ASL 130

ASL131 - Elementary American Sign Language I

Overview

Subject
American Sign Language

Academic Department
Language Studies

School
Liberal Arts

Course Description
Introduces the basic American Sign Language (ASL) skills, focusing on communication in a cultural context. Covers fingerspelling, basic vocabulary and grammatical structures, and the development of visual receptive and gestural expressive skills. Designed for students with little or no previous knowledge of ASL.

Course Pre-requisite(s)
ENG094 ALP: Reading and Writing/ENG095E ALP for ELL:Reading & Writing eligible or instructor permission

Credit Hours
4

Total Contact Hours

Total Instructor Contact Hours:
62

Total Student Contact Hours:
62

Course Fee
44

Academic Level
Undergraduate

General Education Category
Humanities and Fine Arts

Michigan Transfer Agreement (MTA) Category
Category 5: Humanities and Fine Arts - Applied Degrees, Category 5: Humanities and Fine Arts - Transfer Degrees

Goals, Topics, and Objectives

Course Goals
ASL131 Elementary ASL I is designed to enable students to reach the Novice Mid-level on the American Council on the Teaching of Foreign Languages (ACTFL) proficiency scale, focusing on language learning through communication, cultures, connections, comparisons, and communities.

Core Course Topics

1. ASL structure
2. Vocabulary (a core vocabulary of approximately 300 signs)
3. Fingerspelling
4. Numbers
5. Facial expressions/body language
6. Grammar/conversation: simple statements, commands, wh-questions, yes/no questions; affirmative and negative statements
7. Communication strategies: attention-getting; beginning and ending conversations; maintaining eye contact; signer's perspective
8. Deaf history
9. Deaf culture

Recognize differences and similarities between spoken languages and the visual/conceptual structure of American Sign Language, including inflections, questions, negatives, statements, etc.

Identify and use approximately 300 signs Fingerspell the names of classmates and commonly fingerspelled words of three to four letters at a moderate to normal rate of speed within a conversational context.

Understand and express the numbers 1 - 100 Use appropriate facial expressions/body language Initiate and respond to simple statements and questions, and be able to engage in basic face-to-face conversation.

Demonstrate comprehension and production of regulating behaviors (i.e. attention-getting techniques, greeting, turn-taking signals, leaving, and others).

Demonstrate a basic knowledge of the historical and contemporary issues that impact Deaf culture and the Deaf community.

Analyze aspects of Deaf culture that differ from the student's own culture, giving specific examples that illustrate these differences

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of academic achievement will be identified and implemented by the class instructor. Methods will include, but not be limited to:

- Participation
- Weekly/regular quizzes
- Homework assignments
- Chapter/unit tests
- Oral/receptive-expressive exam(s)
- Departmental expressive assessment
- Midterm/final exam

Texts
All sections of this level will use a textbook (and any accompanying materials) selected by the course coordinator and approved by the World Languages Committee.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for ASL 131

ASL132 - Elementary American Sign Language II

Overview

Subject
American Sign Language

Academic Department
Language Studies

School
Liberal Arts

Course Description
Further builds American Sign Language (ASL) skills, focusing on communication in a cultural context. Expands students' knowledge of fingerspelling, vocabulary and grammatical structures, and the development of visual receptive and gestural expressive skills in order to comprehend and express everyday ideas in ASL.

Course Pre-requisite(s)
A grade of C or better in ASL131 Elementary ASL I or in one year of high school American Sign Language, or instructor permission

Credit Hours
4

Total Contact Hours

Total Instructor Contact Hours:
62

Total Student Contact Hours:
62

Course Fee
44

Academic Level
Undergraduate

General Education Category
Humanities and Fine Arts

Michigan Transfer Agreement (MTA) Category
Category 5: Humanities and Fine Arts - Applied Degrees, Category 5: Humanities and Fine Arts - Transfer Degrees

Goals, Topics, and Objectives

Course Goals
ASL132 Elementary ASL II is designed to enable students to reach the Novice-High level on the American Council on the Teaching of Foreign Languages (ACTFL) proficiency scale, focusing on language learning through communication, cultures, connections, comparisons, and communities.

Core Course Topics

1. Vocabulary (a core vocabulary of approximately 800 signs)
2. Fingerspelling
3. Numbers
4. Facial expressions/body language
5. Grammar/conversation: size/shape/location; pronouns; descriptive classifiers; contrastive structures; inflected verbs, negation; questions; commands; responses
6. Communication strategies: making introductions; getting attention; negotiating a signing environment
7. Narration
8. Deaf history/culture
9. Technology
10. Interpreting

Identify and use approximately 800 signs.

Demonstrate a knowledge of the manual alphabet, with appropriate fingerspelling conventions, when fingerspelling at a normal rate of speed within a conversational context.

Use ordinal numbers and numbers for age and time.

Use appropriate facial expressions/body language.

Perform complex visual-spatial tasks related to size, shape, and locations; use personal and possessive pronouns, descriptive classifiers, contrastive structures, inflected verbs and negation correctly; respond to simple commands and questions using correct ASL syntax, usage, and conventions.

Demonstrate comprehension and production of regulating behaviors (making introductions, getting attention, negotiating a signing environment).

Narrate in ASL the events of a brief story.

Analyze and discuss the history, lifestyles, and traditions of the diverse cultures that make up the Deaf World.

Use appropriate technology for/within the Deaf community (camera, recorders, videophones, etc.).

Explain the interpreter's role and responsibilities and the interpreting process

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of academic achievement will be identified and implemented by the class instructor. Methods will include, but not be limited to:

- Participation
- Weekly/regular quizzes
- Homework assignments
- Chapter/unit tests
- Oral/receptive-expressive exam(s)

Texts • Midterm/final exam
All sections of this level will use a textbook (and any accompanying materials) selected by the course coordinator and approved by the World Languages Committee.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for ASL 132

ASL135 - Fingerspelling and Numbering

Overview

Subject
American Sign Language

Academic Department
Language Studies

School
Liberal Arts

Course Description
Provides an overview of American Sign Language (ASL) fingerspelling techniques and numbering skills, focusing on improving students' receptive and expressive skills so that students will be able to communicate with speed, dexterity and clarity.

Course Pre-requisite(s)
ENG094 ALP: Reading and Writing/ENG095E ALP for ELL:Reading & Writing eligible or instructor permission

Credit Hours
2

Total Contact Hours
Total Instructor Contact Hours:
32

Total Student Contact Hours:
32

Course Fee
10

Academic Level
Undergraduate

General Education Category
Humanities and Fine Arts

Michigan Transfer Agreement (MTA) Category
Category 5: Humanities and Fine Arts - Applied Degrees, Category 5: Humanities and Fine Arts - Transfer Degrees

Goals, Topics, and Objectives

Course Goals
ASL135 Fingerspelling and Numbering is designed to enable students to improve their fluency and clarity in receptive and expressive fingerspelling and numbering skills.

Core Course Topics

1. Uses of fingerspelling and numbering
2. Terminology
3. Warm-up exercises
4. Hand, arm, and wrist positions
5. American manual alphabet
6. Multiple-letter words and syllable groups
7. Letter position
8. Commonly-used fingerspelled words, acronyms, abbreviations, and loan signs
9. Clarity, accuracy, and fluidity
10. Numbering systems
11. Facial focus
12. Receptive techniques
13. Contextual clues
14. Mouthing fingerspelled words
15. Differences between Deaf and hearing communities

Identify the various uses of fingerspelling and numbering conventions in American Sign Language (ASL)
Demonstrate an understanding of appropriate terminology associated with fingerspelling and numbering
Perform warm-up exercises to relax muscles and prevent stress to the hands, wrists, and arms
Demonstrate the appropriate hand, arm, and wrist position for clear fingerspelling
Recognize and articulate all the letters of the American manual alphabet clearly and accurately with regard to letter formation, palm orientation and hand position
Recognize and read words of three to four letters (rather than individual letters)
Recognize words or word groups by their configuration, context, or visible letters in initial, middle and/or final position
Recognize and articulate commonly-used fingerspelled words, acronyms, abbreviations, and loan signs
Fingerspell words, numbers and loan signs clearly and accurately in regard to articulation, rate of transition from letter to letter, word configuration and distinction between words, moving from one letter to the next in a rhythmic fashion without extraneous movements
Recognize common ASL number systems, and identify what types of numbers are represented by different locations, palm orientations, and movements
Recognize fingerspelled words, word groups or numbers while eyes are focused on the signer's face, utilizing peripheral vision to allow for input from non-manual markers, speech-reading techniques, and speaker affect as well as from fingerspelling

Employ various receptive fingerspelling techniques, such as prediction skills, word patterns, rhythm and phrasing

Demonstrate the ability to incorporate contextual clues to aid in closure when letters or words are missed or not clearly fingerspelled

Demonstrate the ability to simultaneously, without voice, mouth fingerspelled words

Analyze differences between the Deaf culture/community and the hearing culture/community

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of academic achievement will be identified and implemented by the class instructor. Methods will include, but not be limited to:

- Participation
- Weekly/regular quizzes
- Homework assignments
- Chapter/unit tests
- Oral/receptive-expressive exam(s)
- Midterm/final exam

Texts
All sections of this level will use a textbook (and any accompanying materials) selected by the course coordinator and approved by the World Languages Committee.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for ASL 135

ASL140 - Fingerspelling and Numbering

Overview

Subject
American Sign Language

Academic Department
Language Studies

School
Liberal Arts

Course Description
Provides an overview of American Sign Language (ASL) fingerspelling techniques and numbering skills, focusing on improving students' receptive and expressive skills so that students will be able to communicate with speed, dexterity and clarity.

Course Pre-requisite(s)
ENG094 ALP: Reading and Writing/ENG095E ALP for ELL:Reading & Writing eligible or instructor permission

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
44

Academic Level
Undergraduate

General Education Category
Humanities and Fine Arts

Michigan Transfer Agreement (MTA) Category
Category 5: Humanities and Fine Arts - Transfer Degrees, Category 5: Humanities and Fine Arts - Applied Degrees

Goals, Topics, and Objectives

Course Goals
ASL140 Fingerspelling and Numbering is designed to enable students to improve their fluency and clarity in receptive and expressive fingerspelling and numbering skills.

Core Course Topics

1. Uses of fingerspelling and numbering
2. Terminology
3. Warm-up exercises
4. American manual alphabet
5. Multiple-letter words and syllable groups
6. Letter position
7. Commonly-used fingerspelled words, acronyms, abbreviations, and loan signs
8. Clarity, accuracy, and fluidity
9. Numbering systems
10. Facial focus
11. Receptive techniques
12. Contextual clues
13. Mouthing fingerspelled words
14. Differences between Deaf and hearing communities

Identify the various uses of fingerspelling and numbering conventions in American Sign Language (ASL) .

Demonstrate an understanding of appropriate terminology associated with fingerspelling and numbering.

Perform warm-up exercises to relax muscles and prevent stress to the hands, wrists, and arms.

Recognize and articulate all the letters of the American manual alphabet clearly and accurately with regard to letter formation, palm orientation, and hand position.

Recognize and read words of three to four letters (rather than individual letters).

Recognize words or word groups by their configuration, context, or visible letters in initial, middle and/or final position.

Recognize and articulate commonly used fingerspelled words, acronyms, abbreviations, and loan signs.

Fingerspell words, numbers and loan signs clearly and accurately in regard to articulation, rate of transition from letter to letter, word configuration and distinction between words, moving from one letter to the next in a rhythmic fashion without extraneous movements.

Recognize common ASL number systems, and identify what types of numbers are represented by different locations, palm orientations, and movements.

Recognize fingerspelled words, word groups or numbers while eyes are focused on the signer's face, utilizing peripheral vision to allow for input from non-manual markers, speech-reading techniques, and speaker affect as well as from fingerspelling.

Employ various receptive fingerspelling techniques, such as prediction skills, word patterns, rhythm and phrasing.

Demonstrate the ability to incorporate contextual clues to aid in closure when letters or words are missed or not clearly fingerspelled.

Demonstrate the ability to simultaneously, without voice, mouth fingerspelled words.

Analyze differences between the Deaf culture/community and the hearing culture/community.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of academic achievement will be identified and implemented by the class instructor. Methods will include, but not be limited to: Participation, Weekly/regular quizzes, Homework assignments, Chapter/unit tests, Oral/receptive-expressive exam(s), Midterm/final exam

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for ASL 140

ASL231 - Intermediate American Sign Language I

Overview

Subject
American Sign Language

Academic Department
Language Studies

School
Liberal Arts

Course Description
Follows ASL-132 and is the first of two intermediate-level American Sign Language (ASL) courses focusing on communication in a cultural context. Develops knowledge of fingerspelling, vocabulary and grammatical structures, and expands visual receptive and gestural expressive skills in order to comprehend and express essential ideas in ASL.

Course Pre-requisite(s)
A grade of C or better in ASL132 Elementary ASL II or in two years of high school American Sign Language, or instructor permission

Credit Hours
4

Total Contact Hours
Total Instructor Contact Hours:
62

Total Student Contact Hours:
62

Course Fee
44

Academic Level
Undergraduate

General Education Category
Humanities and Fine Arts

Michigan Transfer Agreement (MTA) Category
Category 5: Humanities and Fine Arts - Applied Degrees, Category 5: Humanities and Fine Arts - Transfer Degrees

Goals, Topics, and Objectives

Course Goals
ASL231 Intermediate ASL I is designed to enable students to reach the Intermediate-Low level on the American Council on the Teaching of Foreign Languages (ACTFL) proficiency scale, focusing on language learning through communication, cultures, connections, comparisons, and communities.

Core Course Topics
1. Core vocabulary (approximately 1000 signs)
2. Vocabulary expansion strategies
3. Fingerspelling and numbering
4. Facial expressions, body language and non-manual signals
5. Grammar
6. Conversation
7. Communication strategies
8. Narration
9. Deaf events
10. Deaf history and culture

Identify and use approximately 1000 signs.

Demonstrate the ability to utilize ASL expansion strategies when specific vocabulary is unknown.

Demonstrate increased fluency and accuracy in fingerspelling and numbering.

Employ non-manual grammar and facial expressions to match the appropriate register.

Identify, recognize, comprehend and produce: advanced sentence structures, syntax, spatialization, advanced verbs and tense, and instrument classifiers.

Demonstrate the ability to initiate, conduct and terminate context-specific conversations with Deaf or ASL users other than the professor.

Analyze and use different patterns of communication and social interaction appropriate to the setting.

Demonstrate expressive mastery of dialogues and short-sentence narratives utilizing ASL grammatical features.

Demonstrate understanding of social interaction patterns within ASL and Deaf culture(s) through participation in cultural activities within and beyond the school setting. Analyze and discuss the history, lifestyles, and traditions of the diverse cultures that make up the Deaf world.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of academic achievement will be identified and implemented by the class instructor. Methods will include, but not be limited to:

- Participation
- Weekly/regular quizzes
- Homework assignments
- Chapter/unit tests
- Oral/receptive-expressive exam(s)
- Midterm/final exam

Texts
All sections of this level will use a textbook (and any accompanying materials) selected by the course coordinator and approved by the World Languages Committee.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for ASL 231

ASL232 - Intermediate American Sign Language II

Overview

Subject
American Sign Language

Academic Department
Language Studies

School
Liberal Arts

Course Description
Follows ASL-231 and is the second of two intermediate-level American Sign Language (ASL) courses focusing on communication in a cultural context. Further develops knowledge of fingerspelling, vocabulary and grammatical structures, and expands visual receptive and gestural expressive skills in order to comprehend and express a wide range of ideas in ASL.

Course Pre-requisite(s)
A grade of C or better in ASL232 Intermediate ASL II or in three years of high school American Sign Language, or instructor permission

Credit Hours
4

Total Contact Hours
Total Instructor Contact Hours:
62

Total Student Contact Hours:
62

Course Fee
44

Academic Level
Undergraduate

General Education Category
Humanities and Fine Arts

Michigan Transfer Agreement (MTA) Category
Category 5: Humanities and Fine Arts - Applied Degrees, Category 5: Humanities and Fine Arts - Transfer Degrees

Goals, Topics, and Objectives

Course Goals
ASL232 Intermediate ASL II is designed to enable students to reach the Intermediate-Mid level on the [American Council on the Teaching of Foreign Languages (ACTFL)](http://www.actfl.org/publications/guidelines-and-manuals/actfl-proficiency-guidelines-2012) proficiency scale, focusing on language learning through communication, cultures, connections, comparisons, and communities.

Core Course Topics
1. Core vocabulary (approximately 1200 signs)
2. Fingerspelling and numbering
3. Facial expressions, body language, and non-manual signals
4. Grammar
5. Conversation
6. Narration
7. Translation
8. Interpretation and reception skills
9. Idioms, colloquialisms, and local variations of American Sign Language
10. Deaf events
11. Deaf history and culture

Identify and use approximately 1200 signs.
Demonstrate increased fluency and accuracy in fingerspelling and numbering.
Use appropriate facial expressions, body language, and non-manual signals (hand-shape, orientation, movement, and location) in American Sign Language (ASL).
Demonstrate significant grammatical structures in English and ASL, including: time indicators, questions, classifiers, locatives, negation, and pluralization.
Demonstrate the ability to converse in ASL at an everyday conversational level Integrate skills in discourse styles and structures, and apply the concept of contextualization to narratives.
Demonstrate the ability to translate ASL into English text Interpret receptive skills from signed videos and ASL exams into linguistically and grammatically correct English.
Recognize and express idiomatic expressions, colloquial signs and local variations in ASL.
Demonstrate understanding of social interaction patterns within the ASL and Deaf culture(s) through participation in cultural activities within and beyond the school setting. Analyze and discuss the history, lifestyles, and traditions of the diverse cultures that make up the Deaf world.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of academic achievement will be identified and implemented by the class instructor. Methods will include, but not be limited to:

- Participation
- Weekly/regular quizzes
- Homework assignments
- Chapter/unit tests
- Oral/receptive-expressive exam(s)
- Midterm/final exam

Texts
All sections of this level will use a textbook (and any accompanying materials) selected by the course coordinator and approved by the World Languages Committee.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for ASL 232

ASTR131 - Descriptive Astronomy

Overview

Subject
Astronomy

Academic Department
Physics, Astronomy, and Earth Sciences

School
Science, Tech, Engr & Math

Course Description
Consists of a conceptual introduction to the fundamentals of astronomy. Describes the motion, structure, and evolution of celestial bodies as well as the Universe itself.

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
20

Academic Level
Undergraduate

General Education Category
Natural Sciences

Michigan Transfer Agreement (MTA) Category
Category 6: Natural Sciences - Applied Degrees, Category 6: Natural Sciences - Transfer Degrees - Lecture Only

Goals, Topics, and Objectives

Course Goals
The goal of this course is to strengthen critical thinking skills and scientific literacy through the study of astronomy.
Core Course Topics

1. History of Astronomy
2. Astronomical Coordinate Systems
3. The Motions of the Moon and the Reason for the Phases and Eclipses
4. The Motions of the Earth and the Reason for the Seasons
5. The Motion, Structure, and Evolution of Solar and Extra-Solar Planetary Systems
6. The Nature of Light and Telescope Technology
7. The Motion, Structure, and Evolution of Stars
8. The Motion, Structure, and Evolution of Galaxies
9. The Large-Scale Structure and Evolution of the Universe
10. Circumstellar Habitable Zones and the Search for Life in the Universe
11. The Structure of Science and the Scientific Method

Describe the major models of the universe and discoveries that lead to heliocentrism.

Describe the two primary Astronomical Coordinate Systems.

Explain the phases of the Moon and the different types of eclipses.

Describe the real and apparent motions of the Earth.

Explain the cause of the seasons.

Describe the motion, structure, and evolution of the Solar System, including the bodies therein.

Describe the basic characteristics of light - including wavelength, frequency, velocity, and energy - and how they relate to absorption, emission, and thermal spectra.

Describe the various phenomena of light waves - including reflection, refraction, dispersion, diffraction, interference, polarization, and the Doppler Effect.

Explain how refractor and reflector telescopes work.

Describe the structure and evolution of low, medium, and high-mass stars.

Explain the thermonuclear processes involved in powering the Sun and stars.

Explain how stellar classification led to the development of the H-R Diagram, and how it refined our understanding of stellar evolution.

Identify the major types of galaxies and describe their structure and evolution.

Explain the history of and the evidence supporting the Big Bang Theory.

Describe how our understanding of circumstellar habitable zones refines our search for extra-terrestrial life.

Estimate the number of communicative civilizations in our galaxy.

Describe the Scientific Method and explain the difference between science and pseudo-science.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Student learning will be assessed through homework, quizzes, collaborative activities/projects, and exams.

General Course Requirements and Recommendations
Recommendations include HFC Planetarium visit(s) and/or utilization of astronomy simulation software or websites.

Texts
Standard Introductory Astronomy Textbook

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for ASTR 131

ASTR133 - Introductory Astronomy Laboratory

Overview

Subject
Astronomy

Academic Department
Physics, Astronomy, and Earth Sciences

School
Science, Tech, Engr & Math

Course Description
Emphasizes experimental work with the scientific concepts important in astronomy. Includes planetarium-based observation and/or computer simulations, as well as hands-on experimentation of astronomical phenomena. This course combined with ASTR-131 provides the student with a four-hour laboratory science credit. Two hours of laboratory per week.

Course Pre-requisite(s)
ASTR131 Descriptive Astronomy

Course Co-requisite(s)
ASTR131 Descriptive Astronomy. Previous or concurrent enrollment in ASTR131 Descriptive Astronomy is required.

Credit Hours
1

Total Contact Hours
Total Instructor Contact Hours:
30

Total Student Contact Hours:
30

Course Fee
20

Academic Level
Undergraduate

General Education Category
Natural Sciences

Michigan Transfer Agreement (MTA) Category
Category 6: Natural Sciences - Applied Degrees, Category 6: Natural Sciences - Transfer Degrees - Lab Only

Goals, Topics, and Objectives

Course Goals
The goal of this course is to strengthen and demonstrate critical thinking skills and scientific literacy through experimentation involving real and simulated astronomical data collection and analysis.

Core Course Topics
1. Star Charts
2. Using Astronomy Simulation Software
3. Celestial Motions
4. Lunar and Planetary Characteristics
5. Telescope Construction and Operation
6. Stellar Evolution
7. Hubble's Law

Demonstrate proper use of laboratory equipment, including celestial globes, telescopes, and/or computers and astronomy simulation software.

Collect, plot, and analyze real and simulated astronomical data accurately.

Relate experimental results to accepted astronomical theory.

Demonstrate the proper use of star charts in real and/or simulated sky environments.

Demonstrate an understanding of the structure and motions of our Solar System

Demonstrate an understanding of the structure and evolution of stars.

Demonstrate an understanding of the structure and evolution of the Universe.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
1. Graded activities using laboratory equipment and/or astronomy simulation software to gather data with questions leading the student in the analysis of the data.
2. Practical Examinations on the use of laboratory equipment and/or computer software and website applets simulating astronomical phenomena to gather and analyze data.

Texts
Astronomy Lab Activity Manual

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for ASTR 133

ATMS131 - Weather and Climate

Overview

Subject
Meteorological Science

Academic Department
Physics, Astronomy, and Earth Sciences

School
Science, Tech, Engr & Math

Course Description
A non-mathematical introduction to the behavior of the atmosphere and its causes. Topics include atmospheric structure, earth-sun relationships, heat, humidity, clouds, wind, storms, forecasting, pollution, and climate. Offers students without scientific background an interesting look into the atmosphere and weather that surround them.

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
40

Academic Level
Undergraduate

General Education Category
Natural Sciences

Michigan Transfer Agreement (MTA) Category
Category 6: Natural Sciences - Applied Degrees, Category 6: Natural Sciences - Transfer Degrees - Lecture Only

Goals, Topics, and Objectives

Course Goals
The goal of this course is to, through the process of scientific investigation, instill in the general education student an appreciation of the processes occurring in our atmosphere and the physical principles that govern them.

Core Course Topics
1. Atmospheric structure
2. Earth-Sun relationships
3. Heat and temperature
4. Humidity
5. Clouds
6. Precipitation
7. Wind
8. Storms
9. Weather forecasting
10. Pollution
11. Climate

Identify and define the elements of weather and climate and describe their effects on weather and climate.

Interpret and analyze atmospheric conditions.

Analyze atmospheric data, and interpret it to make simple weather predictions.

Analyze climatic data and interpret it to describe the climate of an area.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
- In class activities centered on the course concepts and their application; especially observation of elements of weather and climate leading to weather prediction and description of climates.
- Homework to review and reinforce lectures and reading on course topics.
- Examinations on course topics and their application.

General Course Requirements and Recommendations
Students will receive instruction on using the Internet to monitor weather and gather weather and climate data.

Texts
Lutgens & Tarbuck, *The Atmosphere*

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for ATMS 131

AUTO101 - Automotive Fundamentals

Overview

Subject
Automotive Technology

Academic Department
Automotive Technology

School
Business, Entrepreneurshp, PD

Course Description
Provides an introduction to the major automotive systems covered in greater detail in other automotive technology specific system classes. Explores how to perform preventive maintenance routines, such as oil changes, tire rotations on standard systems as well as on vehicles equipped with TPMS (Tire Pressure Monitoring System); brake and suspension system inspections; and how to service the cooling system. This is the only course allowed for Secondary Partnership transfer credit (4 credit hours) from approved high school programs.

Credit Hours
4

Total Contact Hours
Total Instructor Contact Hours:
62

Total Student Contact Hours:
62

Course Fee
35

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics
1. Working in the Automotive Service Industry
2. Using Hand Tools
3. Using Power Tools and Equipment
4. Fundamentals of Engine Operation
5. Fuel, Cooling and Lubrication Systems
6. Electrical Systems and Fundamentals
7. Manually Operated Transmission
8. Automatic Transmission
9. Suspension System
10. Steering and Wheel Alignment
11. Brake System
12. Operation of Air Conditioning and Heating System
13. Emission Control System
14. Computerized Engine Controls

Describe the major vehicle operating systems.

Demonstrate how to measure critical dimensions of selected engine components.

Identify the major functioning components in the major automobile systems.

Demonstrate competency in using common automotive laboratory service tools.

Perform cooling system tests.

Perform oil changes.

Perform tire rotations.

Use a hoist. Inspect a brake system.

Repair a tire.

Inspect a suspension system.

Introduce OBD-2 in basic DLC function Identify the major components of a Engine Control and Emissions related system.

Research 6 job opportunities in the Automotive Service Industry.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Measurable objectives will be evaluated by the instructor based on accuracy and proficiency and completion of assigned tasks. Homework, class participation, lab activities, quizzes and tests will be used as criteria to assign the student's final earned grade for this class.

General Course Requirements and Recommendations
Students must take notes on demonstrations, carefully read and analyze assigned course materials and perform exercises to determine their competence in performance of basic automotive service tasks.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for AUTO 101

AUTO102 - Auto Fundamentals&Dealership Operations

Overview

Subject
Automotive Technology

Academic Department
Automotive Technology

School
Business, Entrepreneurshp, PD

Course Description
A course for all ASSET students focusing on the inter-workings of Ford or Lincoln Dealerships. Covers dealer practices of writing warranty reports, work orders, and parts ordering. Introduces general preventative maintenance routines such as oil changes, cooling system service, tire service, and tire pressure monitoring system (TPMS) operation. Use of Ford Motor Company's training system, service publications, prior-approval/technical assistance request, and Service Labor Time Standards (SLTS) will also be discussed.

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
62

Total Student Contact Hours:
62

Course Fee
35

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics
1. Laboratory safety
2. Working in the Automotive Dealership Service Facility
3. Using Hand Tools
4. Using Power Tools and Equipment
5. Basic Maintenance Service
6. Warranty Repair Orders - writing and submission
7. Tire Service
8. TPMS
9. Ford STARS
10. Service Publications
11. SLTS
12. Prior Approvals/Technical Assistance Request

Demonstrate the vehicle major operating systems.

Measure critical dimensions of selected engine components.

Identify the major functioning components in the major automobile systems.

Demonstrate competency in using common automotive laboratory service tools.

Perform cooling system tests.

Perform oil changes.

Perform both a Tire Rotation and Tire Balance.

Demonstrate the proper use a hoist.

Demonstrate lab safety.

Repair a tire.

Perform a NVH Diagnosis.

Introduce OBD-2 in basic DLC function.

Write warranty reports/work orders.

Describe the daily operations of Ford or Lincoln dealerships.

Perform basic navigation of service publications.

Perform basic navigation of SLTS. Understand the use of the Ford STARS system.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Lab activities, quizzes, and a written final examination. Measurable objectives will be evaluated by the instructor based on accuracy and proficiency of completion.

General Course Requirements and Recommendations
Students must take notes on demonstrations, carefully read and analyze assigned course materials and perform exercises to determine their competence in performance of basic automotive service tasks.

Texts
Reference materials will be provided by Ford Motor Company.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for AUTO 102

AUTO103 - Intro Auto Industry & Auto Maintenance

Overview

Subject
Automotive Technology

Academic Department
Automotive Technology

School
Business, Entrepreneurshp, PD

Course Description
Provides an introduction to the major automotive systems covered in greater detail in other automotive technology specific system classes. Explores how to perform preventive maintenance routines, such as oil changes, tire rotations on standard systems as well as on vehicles equipped with TPMS (Tire Pressure Monitoring System); brake and suspension system inspections; and how to service the cooling system.

Credit Hours
2

Total Contact Hours
Total Instructor Contact Hours:
32

Total Student Contact Hours:
32

Course Fee
35

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics
1. Working in the Automotive Service Industry
2. Using Hand Tools
3. Using Power Tools and Equipment
4. Oil Changes
5. Rotation
6. Battery Testing
7. Belts and Hoses Inspection
8. Coolant System Flush
9. Brake Inspection

Describe the major vehicle operating systems.

Identify the major functioning components in the major automobile systems.

Perform cooling system tests.

Perform tire rotations.

Demonstrate proper use of a hoist.

Inspect a brake system.

Repair a tire.

Interpret vehicle information. (VIN number)

Write repair estimates.

Analyze vehicle repair cost.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Measurable objectives will be evaluated by the instructor based on accuracy and proficiency and completion of assigned tasks. Homework, class participation, lab activities, quizzes and tests will be used as criteria to assign the student's final earned grade for this class.

General Course Requirements and Recommendations
Students must take notes on demonstrations, carefully read and analyze assigned course materials and perform exercises to determine their competence in performance of basic automotive service tasks.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for AUTO 103

AUTO105 - Internal Combustion Engines

Overview

Subject
Automotive Technology

Academic Department
Automotive Technology

School
Business, Entrepreneurshp, PD

Course Description
Introduces four-stroke engines by exploring principles of operation, compression ratio, piston displacement, operating tolerances, valve timing, horsepower and torque development along with adjustments, inspection, and troubleshooting procedures. Course topics help students prepare for ASE certification exams and State of Michigan licensure, but these exams/licensure are not included in this course. Laboratory activities.

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
92

Total Student Contact Hours:
92

Course Fee
35

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Engine Operation
2. Cleaning the Engine
3. Engine Shop Safety, Tools, and Equipment
4. Measuring
5. Preliminary Diagnosis Before Repair
6. Engine Removal, Disassembly, Inspection, and In-Car Repairs
7. Cylinder Head
8. Engine Breathing and Power: Cam, Manifolds, and Turbochargers
9. Cylinder Block – Inspection and Service
10. Crankshaft and Bearings, Piston and Rod
11. Lubrication of Cooling Systems
12. Engine Hardware: Fasteners, Thread Repair, and Gaskets
13. Reassembly and Starting

Explain the basics of engine operation.

Identify major components of an engine.

Compare engine tolerances in the English and Metric measuring system.

Identify common internal engine wear points.

Use common precision measuring instruments.

Measuring critical external engine operating parameters.

Measuring critical internal engine operating dimensions.

Diagnose common engine compression, cooling and lubrication problems.

Disassemble a laboratory engine unit.

Clean and inspect disassembled engine parts.

Assemble a laboratory engine unit.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Quizzes, engine assembly / disassembly and a written final examination. Measurable objectives will be evaluated by the instructor based on the accuracy and proficiency of objection completion.

General Course Requirements and Recommendations
Students must take notes on demonstrations, carefully read and analyze assigned course materials and perform exercises to determine their competence in servicing modern engine operating systems.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for AUTO 105

AUTO108 - Basic Automotive Electricity

Overview

Subject
Automotive Technology

Academic Department
Automotive Technology

School
Business, Entrepreneurshp, PD

Course Description
A study of basic automotive electricity theory and principles. Covers voltage, amperage, Ohm's law, accessories, and lighting as well as series, parallel, and series-parallel circuits. Reading of electrical schematics/wiring diagrams is covered. Also discusses the various meters that are used in the service of automobiles. Emphasizes circuit diagnosis and troubleshooting using proper diagnostic techniques and tools, including flex-probes.

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
62

Total Student Contact Hours:
62

Course Fee
30

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Introduction to Electricity
2. Methods of Producing Electron Flow
3. Circuit Types
4. Ohm's Law
5. Magnetism
6. Circuit Faults
7. Electrical Meters
8. Test Devices
9. Circuit Protection
10. Electrical Components
11. Circuit Diagnosis

Use a DMM to diagnose a circuit fault.

Interpret results of voltage drop measurements.

Identify five rules that apply when measuring voltage, current and resistance in a parallel circuit.

Identify four rules that apply when measuring voltage, current and resistance in a series circuit.

Use wiring diagrams during diagnosis of electrical circuit problems.

Check voltage and voltage drop in an electrical circuit.

Analyze and diagnose lighting circuits.

Repair wiring harness and connector faults.

Analyze and test switches, relays and solenoids and perform necessary actions.

Diagnosis incorrect horn and wiper/washer operation.

Diagnose incorrect accessory operation, door locks, heated seats, heated glass, cruise control and power seats and determine necessary action.

Identify and use cause and effect relationships presented in service manual and CD solving trees.

Calculate mathematically ohm's law for circuit solutions.

Use conventional sentence structure, spelling and punctuation when composing sentences for service reports.

Identify the specific cause of the described problem by generating conclusions based on known symptoms related to the problem (SSCC rationale).

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Lab workstations, quizzes, and a written final examination. Measurable objectives will be evaluated by the instructor based on the accuracy and proficiency of completion.

General Course Requirements and Recommendations
Students must take notes on demonstrations, carefully read and analyze assigned course materials and perform exercises to determine their competence in servicing modern electrical systems.

Texts
Ford Motor Company reference text.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for AUTO 108

AUTO110 - Automotive Electrical Systems

Overview

Subject
Automotive Technology

Academic Department
Automotive Technology

School
Business, Entrepreneurshp, PD

Course Description
A basic automotive electricity and electronics course, including the study of the fundamentals of and operation and service required for batteries, cranking motors, alternators, regulators, and certain accessories used on current-production automobiles. NOTE: Course topics and laboratory experiences help the student prepare for ASE certification and State of Michigan licensure in automotive electrical systems, but certification/license are not included in this course.

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
92

Total Student Contact Hours:
92

Course Fee
35

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Basic Electricity and Circuits
2. Magnetism, Electromagnetism and EMI Suppression
3. Semiconductors and Solid State Electronics
4. Automotive Wiring and Basic Circuit Components
5. Batteries
6. AC Charging Systems and Alternators
7. Starting System Overview
8. Starter Motors
9. Inputs and outputs of various electronic control modules, their functions, and how they relate to vehicle and engine operation
10. Fuel and ignition system overview
11. Body Electrical and Electronic Systems
12. Vehicle Communication Networks

Use electronic diagnostic tools and equipment commonly found in a modern repair facility and interpret results.

Perform measurement of voltage, current and resistance in automotive electrical circuits.

Interpret automotive electrical wiring diagrams and diagnosis circuit for intermittent faults.

Identifying and diagnosing shorts and opens in automotive electrical circuits.

Diagnose Starting/Charging system fault

Perform electrical system repairs to industry standards/OEM integrity of aftermarket service and diagnostic information.

Explain the differences in Network protocols Perform a PMI Diagnosis communications network fault using DSO Diagnose a BCM controlled accessory operation failure

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Homework, quizzes, lab reports and final examination. Measurable objectives will be evaluated by the instructor based accuracy and proficiency of completion.

General Course Requirements and Recommendations
Students must take notes on demonstrations, carefully read and analyze assigned course materials, and perform exercises to determine their competence in servicing modern electrical systems.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for AUTO 110

AUTO120 - Automotive Fuel Management Systems

Overview

Subject
Automotive Technology

Academic Department
Automotive Technology

School
Business, Entrepreneurshp, PD

Course Description
Introduces the types of fuels and air/fuel ratio requirements of the various fuels used in current automotive engines, along with the construction and operation of fuel delivery systems. Discusses fuel pumps, fuel lines, fuel filters, and storage tanks. Fuel system types include returnable electronic fuel injection, returnless electronic fuel injection, and gasoline direct fuel injection. Also discusses elements of mechanical and electronic automotive emissions. This course also covers the use of diagnostic scan tools and covers vehicle programming principals.

Credit Hours
2

Total Contact Hours

Total Instructor Contact Hours:
62

Total Student Contact Hours:
62

Course Fee
35

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Introduction to Fuel Systems an Emission Controls
2. Engine Operating Principles
3. Gasoline and Alternative Fuels
4. Engine Fuel-Air Requirements
5. Fuel Tanks, Lines, and Evaporative Emission Controls
6. Fuel Pumps and Filter
7. Air Cleaners and Filters
8. Intake and Exhaust Manifolds
9. Electronic Fuel Metering Control
10. Electronic Engine Control Systems
11. Gasoline Fuel-Injection Systems
12. Supercharging and Turbocharging
13. Variable and Flexible Fuel Systems
14. Positive Crankcase Ventilation, Air Injection Systems, and Catalytic Converters

Recognize and identify selected modern fuel systems components.

Explain Stoichiometric air/fuel ratios for gasoline and alternative fuels.

Identify components of the fuel storage sub-system.

Identify components of a Fuel Injection system.

Explain the function of the Induction and Exhaust system.

Measure fuel rail pressure - load and no-load.

Perform injector electrical tests.

Perform injector leakdown tests.

Measure electrical parameters of sensors and actuators.

Diagnose engine malfunctions relating to the vehicle fuel management system.

Perform basic fuel system feedback tests.

Use diagnostic trouble codes to analyze vehicle drive ability symptoms.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Tests, Lab Reports and a comprehensive final examination. Measurable objectives will be evaluated by the instructor based on the accuracy and proficiency of objective completion.

General Course Requirements and Recommendations
Students must take notes on demonstrations, carefully read and analyze assigned course materials, and perform exercises to determine their competence in servicing modern fuel management systems.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for AUTO 120

AUTO121 - Electronic Fuel & Emissions Control Syst

Overview

Subject
Automotive Technology

Academic Department
Automotive Technology

School
Business, Entrepreneurshp, PD

Course Description
Introduces electronic computer-controlled fuel delivery and metering systems. Discusses electronic emission controls and environmental impact of tailpipe emissions. Comparison of mechanical historical fuel and emissions control systems to modern electronic systems. Discussion of onboard diagnostic system monitors. Provides exposure to electronic diagnostic equipment. Also, discusses connected vehicle monitoring and autonomous over-the-air controller updates.

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
92

Total Student Contact Hours:
92

Course Fee
35

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Introduction to Fuel Systems an Emission Controls
2. Engine Operating Principles
3. Gasoline and Alternative Fuels
4. Engine Fuel-Air Requirements
5. Fuel Tanks, Lines, and Evaporative Emission Controls
6. Fuel Pumps and Filter Air Cleaners, Filters, and Air Induction Systems
7. Electronic Drive-by-Wire Throttle Control Systems
8. Intake and Exhaust Manifolds
9. Electronic Fuel Injection Systems
10. Electronic Powertrain Control Systems
11. Onboard Diagnostics and System Monitors
12. Ethanol Based Fuel Systems
13. Supercharging and Turbocharging
14. Flexible Fuel Systems
15. Positive Crankcase Ventilation
16. Secondary Air Injection Systems
17. Catalyst Systems and Monitors
18. Evaporative Emissions Systems and Monitors
19. Electro-Mechanical Exhaust Gas Recirculation Systems and Monitors
20. Electrical Exhaust Gas Recirculation Systems and Monitors

Recognize and identify selected modern fuel systems components.

Explain Stoichiometric air/fuel ratios for gasoline and alternative fuels.

Identify components of the fuel storage and delivery systems.

Identify components of a fuel injection system.

Explain the function of the air induction system.

Identify and explain the components of catalyst system.

Measure fuel pressure in primary and secondary fuel delivery systems.

Perform electronic fuel injector flow tests.

Perform fuel injector leak down tests.

Measure electrical parameters of sensors and actuators.

Diagnose engine malfunctions relating to the vehicle fuel management system with diagnostic scan tool.

Access and report data from emissions control systems OBD Monitors.

Identify and report fuel trim data in relationship to oxygen sensor/air fuel sensor operation.

Use diagnostic trouble codes to analyze vehicle drive ability symptoms.

Identify type of positive crankcase ventilation system and perform flow testing.

Apply tailpipe emissions control data to engine diagnostic procedures and engine evaluation.

Perform bi-directional controls of fuel systems to affect testing and diagnosis of powertrain management systems.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Tests, lab reports and a comprehensive final examination. Measurable objectives will be evaluated by the instructor based on the accuracy and proficiency of objective completion.

General Course Requirements and Recommendations
Students must take notes on demonstrations, carefully read and analyze assigned course materials, and perform exercises to determine their competence in servicing modern fuel management systems.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for AUTO 121

AUTO131 - Automotive Ignition Systems

Overview

Subject
Automotive Technology

Academic Department
Automotive Technology

School
Business, Entrepreneurshp, PD

Course Description
An intermediate-level course covering the operating principles, construction, troubleshooting and maintenance of units of the automotive ignition system, including distributors, coils, electronic controls and advance mechanisms. Studies ignition timing, wiring, and ignition malfunctions as well as electronic ignition systems and ignition-related emission controls.

Course Pre-requisite(s)
AUTO105 Internal Combustion Engines, AUTO121 Elec Fuel & Emissions Control, and AUTO131 Auto Ignition Systems or Instructor Permission

Credit Hours
2

Total Contact Hours
Total Instructor Contact Hours:
32

Total Student Contact Hours:
32

Course Fee
35

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Introduction to ignition systems
2. Engine 4 stroke operating principles
3. Ignition coil design and operation
4. Ignition timing mechanisms and procedures
5. Computer controlled timing systems
6. Base ignition component testing
7. Spark plug replacement interval and procedure
8. Distributor removal and installation procedure
9. Electronic system components and testing base operation

Recognize and identify selected modern ignition systems components.

Interpret results of analog oscilloscope analyzer patterns.

Interpret results of digital oscilloscope analyzer patterns.

Perform secondary ignition tests.

Perform primary ignition tests.

Diagnose engine malfunctions relating to the vehicle ignition systems.

Diagnose a crank no start condition.

Check and adjust ignition timing. Static time a distributor.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Measurable objectives will be evaluated by the instructor based on accuracy and proficiency and completion of assigned tasks. Attendance, homework, class participation, lab activities, quizzes and tests will be used as criteria to assign the student's final earned grade for this class.

General Course Requirements and Recommendations
Students must take notes on demonstrations, carefully read and analyze assigned course materials and perform exercises to determine their competence in servicing modern ignition systems.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for AUTO 131

AUTO132 - Computer Controld Ignition Sys&engin Per

Overview

Subject
Automotive Technology

Academic Department
Automotive Technology

School
Business, Entrepreneurshp, PD

Course Description
An intermediate-level course on computer-controlled ignition systems and engine performance. Studies systems currently in use as well as newer systems available in the future.

Course Pre-requisite(s)
AUTO131 Auto Ignition Systems

Credit Hours
2

Total Contact Hours
Total Instructor Contact Hours:
32

Total Student Contact Hours:
32

Course Fee
35

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Review of four-stroke cycle operation and the combustion process.
2. Ignition coil design, operation, and testing.
3. Review of ignition timing mechanisms and computer timing strategies.
4. Review of point controlled systems and electronic systems.
5. Electronic system component testing.
6. Computer control strategies.
7. Computer inputs/outputs: operation and testing.
8. DIS systems operation and testing.
9. Coil-near-plug and coil-on-plug operation and testing.
10. Performance and drivability diagnosis and testing methods.

Diagnose no-starting and driveability concerns on vehicles with electronic ignition (EI/DIS) systems.

Inspect and test coil pack ignition system. Inspect and test coil on plug ignition system.

Use pinpoint tests to diagnose intermittent ignition concerns on coil on plug systems.

Determine ignition fault by analyzing results of ignition test function of VCMM and IDS.

Using PC/ED determine root cause of DTC associated fault code for ignition failure.

Use pinpoint tests to determine root cause of CKP/CMP failure.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Lab workstations, quizzes and a written final examination. Measurable objectives will be evaluated by the instructor based on the accuracy and proficiency of completion.

General Course Requirements and Recommendations
Students must take notes on demonstrations, carefully read and analyze assigned course materials and perform exercises to determine their competence in servicing modern electronic computer controlled ignition systems.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for AUTO 132

AUTO135 - Mathematics for the Technician

Overview

Subject
Automotive Technology

Academic Department
Automotive Technology

School
Business, Entrepreneurshp, PD

Course Description
Covers basic mathematics skills specific to the technical field as well as examining measurement aspects beginning with angle and linear measurement, ratios and proportions, basic algebraic expressions, geometry as applied to area and volume calculations - as well as suspension geometry for vehicle alignment, and vibration analyzer data analysis.

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
35

Academic Level
Undergraduate

General Education Category
Mathematics

Michigan Transfer Agreement (MTA) Category
Category 3: Mathematics - Applied Degrees

Goals, Topics, and Objectives

Core Course Topics

1. Whole Numbers
    - Subtracting whole numbers
    - Multiplying whole numbers
    - Dividing whole numbers
    - Rules and checks
2. Integers and signed numbers
    - Adding signed numbers
    - Subtracting signed numbers
3. Ratios, proportions and percentages
    - Ratio
    - Proportions: Direct and Indirect
    - Percentages
4. Geometry: Angles and figures
5. Metric
    - ISO metric history
    - Application
    - Conversion
6. Measurement Tools
    - Scale measurement
    - Test meters
    - Dial indicators
    - Micrometers
    - Drill sizes
7. Application of Principles-Formulas
    - Automotive engine
    - Automotive electrical
    - Automotive drive train
    - Automotive chassis
    - Automotive heating and air conditioning

Calculate engines displacement when given stroke, bore and number of cylinders.

Calculate the alignment angles and their corrective factors.

Using the formulas provided determine speed errors when different size tires are used.

Calculate vibration frequencies when given tire size and rotational speed.

Use vibration analyzer to perform driveshaft balance procedure.

Calculate hydraulic system pressure when given piston diameters and applied force.

Analyze and solve problems requiring the use of fractions, decimals, ratios, or percentages by a direct or indirect variation of the numerical elements of the problem.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Lab workstations, quizzes, tests, hands-on test, and a written final examination.

General Course Requirements and Recommendations
Students must take notes on lectures, carefully read and analyze assigned course materials and perform exercises to determine their competence in using various formulas covered in class.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for AUTO 135

AUTO140 - Automotive Transmissions Systems

Overview

Subject
Automotive Technology

Academic Department
Automotive Technology

School
Business, Entrepreneurshp, PD

Course Description
Covers automatic transmissions and transaxles. Emphasizes the operating principles, construction, adjustments, troubleshooting, and maintenance of automatic transmissions. Also examines clutches, bands, solenoids and torque converters.

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
92

Total Student Contact Hours:
92

Course Fee
35

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Dry Friction Plate Clutches and Related Elements
2. Underdrive/Overdrive Gearing
3. Gear Ratios and Gear Designs
4. Selected 4, 5 & 6 Speed Manually Shifted Transmission
5. Selected 4 & 5 Speed Manually Shifted Transaxles,
6. Automatic Transmission Fundamentals
7. Selected 3, 4 & 5 Speed Automatically Shifted Transmissions
8. Electronic Transmission Controls
9. Drive Shafts, Half Shafts and Universal Joints

Disassemble and reassemble a selected automatic transmission.

Measure internal wear tolerances for selected transmission components.

Diagnose low pressure pump problem.

Diagnose "no up-shift" problem. Adjust automatic transmission shift linkage.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Measurable objectives will be evaluated by the instructor based on accuracy and proficiency and completion of assigned tasks. Homework, class participation, lab activities, quizzes and tests will be used as criteria to assign the student's final earned grade for this class.

General Course Requirements and Recommendations
Students must take notes on demonstrations, carefully read and analyze assigned course materials and perform exercises to determine their competence in servicing modern power transmission systems.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for AUTO 140

AUTO142 - Automatic Transmission Controls/Diagnosi

Overview

Subject
Automotive Technology

Academic Department
Automotive Technology

School
Business, Entrepreneurshp, PD

Course Description
Delves deeper into topics covered in AUTO-140 with additional experiences in the service and repair operations related to current electronically controlled automatic transmissions. Emphasizes electronic control systems.

Course Pre-requisite(s)
AUTO140 Auto Transmission or Instructor Permission

Credit Hours
2

Total Contact Hours

Total Instructor Contact Hours:
32

Total Student Contact Hours:
32

Course Fee
35

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Mechanical Power Trains
2. Hydraulic Control Circuits
3. Automatic Transmission Fundamentals
4. Electronic Transmission Controls
5. Inspection and Diagnosis of Selected Transmission Problems

Use digital multi-meter to check circuits for opens, shorts and grounds.
Analyze electronic transmission control circuits.
Measure transmission hydraulic line pressure.
Perform operational check of torque converter clutch.
Perform operational check of shift solenoids.
Use scan tool to obtain trouble codes and data from transmission control module.
Diagnose shifting and engagement problems (no shift/engagement, soft shift/delayed engagement, harsh shift/engagement)

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Lab workstations, quizzes and a written final examination. Measurable objectives will be evaluated on the basis of instructor evaluations.

General Course Requirements and Recommendations
Students must take notes on demonstrations, carefully read and analyze assigned course materials and perform exercises to determine their competence in servicing electronically controlled transmissions.

Texts
No Text Required. Hand-Outs provided.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for AUTO 142

AUTO145 - Manual Transmissions and Transaxles

Overview

Subject
Automotive Technology

Academic Department
Automotive Technology

School
Business, Entrepreneurshp, PD

Course Description
Explores the theory of operation, construction, diagnosis, maintenance, and service of automobile manual transmissions, transaxles, and clutches. Emphasizes how to disassemble, inspect, and measure various transmissions.

Credit Hours
4

Total Contact Hours

Total Instructor Contact Hours:
62

Total Student Contact Hours:
62

Course Fee
35

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Clutches
   - Theory of Operation
   - Design and Types
   - Linkages
   - Clutch Service
2. Clutch Diagnosis
   - Clutch Service
   - Clutch Replacement
   - Hydraulic System Diagnosis and Service
   - Flywheel Diagnosis and Inspection
3. Transmission
   - Gear theory and Design
   - Transmission Types
   - Construction and Torque Capacity
   - Shift Mechanisms
   - Synchronizers
   - Power Flows
   - Lubricants and Lubrication
4. Transaxles
   - Construction
   - Power Flows
   - Shift Mechanisms
   - Final Drives
5. Transmission/Transaxle Service
   - Diagnosis of Transmission/Transaxle Concerns
   - Service Techniques/Special Tools
   - Transmission/Transaxle Disassembly
   - Inspection and Gaging
   - Transmission Assembly and Clearance Checks
   - Final Analysis
6. Propeller Shaft and Universal Joint
   - Drive Shaft Theory and Construction
   - Universal Joint Theory
   - Universal Joint Types and Construction
   - FWD Drive Shafts Theory and Construction
   - Constant Velocity Joints Theory
7. Propeller Shaft and universal Joint Service
   - Diagnosis of Drive Shaft Concerns
   - Inspection and Measurement
   - Drive Shaft Removal and Installation
   - Universal Joint Diagnosis
   - U-Joint Removal and Installation

Diagnose transaxle final drive assembly noise and vibration concerns and determine necessary action.
Inspect, test and replace transmission/transaxle sensors and switches.
Trace power flow through gear ratio.
Diagnose clutch noise, slippage, pulsation and shatter, determine necessary action. Inspect housing and flywheel alignment using proper instrumentation and application.
Diagnose drive axle shaft bearings for noise, vibration and harshness, determine necessary action.

Comprehend and use cause and effect relationships presented in service manual and CD solving trees.

Use conventional sentence structure, spelling and punctuation when composing sentences for service reports.

Identify specific cause of the described problem by generating conclusions based on known symptoms related to the problem (SSCC rationale).

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Measurable objectives will be evaluated by the instructor based on accuracy and proficiency and completion of assigned tasks. Homework, class participation, lab activities, quizzes and tests will be used as criteria to assign the student's final earned grade for this class.

General Course Requirements and Recommendations
Students must take notes on demonstrations, carefully read and analyze assigned course materials and perform exercises to determine their competence in servicing modern manual transmission, driveline and clutch systems.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for AUTO 145

AUTO150 - Automotive Diagnosis & Engine Eval

Overview

Subject
Automotive Technology

Academic Department
Automotive Technology

School
Business, Entrepreneurshp, PD

Course Description
An advanced-level course in the application of diagnosing, locating, and correcting trouble encountered in automotive service, using various types of testing equipment. Engine diagnosis includes variable cam timing and variable displacement engine systems. Compression analysis including cylinder compression testing and cylinder leak down testing. Fuel system diagnosis includes pressure and injector tests using active commands and relative flow analysis. Cooling system evaluation and testing, including identification of cooling system components. Coursework also explores various common problems that occur in the servicing of the modern automobile. Ignition system diagnostics that includes the use of secondary ignition scope and electronic system testing.

Course Pre-requisite(s)
AUTO105 Internal Combustion Engines, AUTO110 Auto Elect, AUTO121 Elec Fuel & Emissions Control, or Instructor Permission

Credit Hours
2

Total Contact Hours
Total Instructor Contact Hours:
62

Total Student Contact Hours:
62

Course Fee
35

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. The Automobile Engine
2. Automobile Engine Systems
3. Automobile Electrical Systems
4. Automobile Emission Control
5. Automobile Electronic Control Systems

Engine systems measurable performance laboratory tests.

Perform Engine Cylinder Leakage Test

Perform Engine Compression Test

Perform Dynamic Compression Test

Perform Cooling System Pressure Test

Perform Anti-Freeze Acidity Test

Perform Head Gasket Leak Test with NDIR ANALYZER

Fuel system measurable performance laboratory Tests

Perform Fuel Rail Pressure Test

Perform Fuel Pressure Regulator Test

Perform Injector Leakage Test

Perform Injector Balance Test

Perform Cylinder Power Contribution Tests.

Perform Cooling System Performance Tests.

Diagnose Exhaust System Back Pressure Tests.

Perform Secondary Ignition System Performance Tests.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Measurable objectives will be evaluated by the instructor based on accuracy and proficiency and completion of assigned tasks. Homework, class participation, lab activities, quizzes and tests will be used as criteria to assign the student's final earned grade for this class.

General Course Requirements and Recommendations
Students must take notes on demonstrations, carefully read and analyze assigned course materials, and perform exercises to determine their competence in servicing modern engine and vehicle operating systems.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for AUTO 150

AUTO160 - Automotive Chassis Units

Overview

Subject
Automotive Technology

Academic Department
Automotive Technology

School
Business, Entrepreneurshp, PD

Course Description
A study of the construction, operation, and maintenance of the various chassis units. Examines steering, suspension systems, and alignment as well as disc and drum braking systems. Study of tire pressure monitoring system functionality.

Credit Hours
2

Total Contact Hours
Total Instructor Contact Hours:
62

Total Student Contact Hours:
62

Course Fee
35

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Chassis Construction, Fasteners and Safety
2. Braking System Principles, Components and Operation
3. Braking System Principles, Components and Operation
4. Wheel Bearings and Service
5. Drum Brake Operation, Diagnosis and Service
6. Disc Brake Operation, Diagnosis and Service
7. Parking Brake Operation, Diagnosis and Service
8. Machining Brake Drums and Rotors
9. Power Brake Unit Operation, Diagnosis and Service
10. Antilock Braking System Operation
11. Tires and Wheels
12. Steering System Operation
13. Suspension System Operation
14. Wheel Alignment
15. Tire Pressure Monitoring Systems

Mount, inspect and balance tires and wheels.

Identify hydraulic brake system components.

Identify suspension and alignment components.

Identify common drum and disc brake systems.

Use common brake tools.

Use common wheel alignment tools.

Perform basic wheel alignment procedures.

Apply steering geometry to common vehicle alignment problems.

Preform drum brake machining.

Preform disc brake rotor machining.

Preform TPMS relearn and reset.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Measurable objectives will be evaluated by the instructor based on accuracy and proficiency and completion of assigned tasks.Homework, class participation, lab activities, quizzes and tests will be used as criteria to assign the student's final earned grade for this class.

General Course Requirements and Recommendations
Students must take notes on demonstrations, carefully read and analyze assigned course materials and perform exercises to determine their competence in servicing modern automotive chassis systems.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for AUTO 160

AUTO162 - Antilock Brake Systems

Overview

Subject
Automotive Technology

Academic Department
Automotive Technology

School
Business, Entrepreneurshp, PD

Course Description
Covers the theory and operation of Anti-lock Brake Systems (ABS) and traction control systems. Includes the design and construction of ABS braking systems, as well as traction control system operating principles. Diagnostic techniques, troubleshooting, and repair of ABS/TC, along with service techniques and hands-on experiences are an integral component of the coursework.

Course Pre-requisite(s)
AUTO160 Auto Chassis Units

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
62

Total Student Contact Hours:
62

Course Fee
35

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Introduction to ABS and Traction Control
2. ABS and Traction Control Operating Strategies
3. ABS/TC Components
4. ABS/TC diagnosis
5. ABS/TC repair and bleed procedures
6. Analyze ABS/TC scan tool data

Explain the basic operation of an ABS system.

Identify and compare the different types of ABS and traction systems used on various automobiles.

Define the basic functions of the major components of each ABS system.

Select a typical ABS symptom and choose the appropriate action.

Navigate the service publications necessary to diagnose an ABS fault.
Interpret an ABS symptom chart.

Perform a PPT test and take the appropriate actions.

Bleed the ABS system utilizing the scan tool service function.

Diagnose any ABS concerns caused by vehicle modifications.

Identify traction control system components and differentiate from ABS function.

Measure and/or test with meters and measuring instruments for English or metric measurements, then convert the results to the manufacturer's specifications.

Write warranty reports and work orders to include information regarding problem resolution and the result of the work performed.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Measurable objectives will be evaluated by the instructor based on accuracy and proficiency and completion of assigned tasks. Workstations, homework, class participation, lab activities, quizzes and tests will be used as criteria to assign the student's final earned grade for this class.

General Course Requirements and Recommendations
Students must take notes on demonstrations, carefully read and analyze assigned course materials, and perform exercises to determine competence in servicing modern ABS and Traction Control systems.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for AUTO 162

AUTO165 - Electronic Steering and Suspension

Overview

Subject
Automotive Technology

Academic Department
Automotive Technology

School
Business, Entrepreneurshp, PD

Course Description
Introduces the theory and operation of electronic steering and electronic or active suspension systems. Also covers theory and operation of steering and suspension multiplexing, diagnosis and repair procedures, and alignment concepts. Lab activities are an integral component of the coursework.

Course Pre-requisite(s)
AUTO160 Auto Chassis Units

Credit Hours
4

Total Contact Hours

Total Instructor Contact Hours:
62

Total Student Contact Hours:
62

Course Fee
35

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Introduction to electronic steering and suspension
    - Application of electronics to suspension and steering
    - Vehicle dynamics
    - Review of Electronics
2. Electronic Steering
    - Operation
    - System types
    - Components
    - System strategies
3. Electronic steering diagnosis and testing
    - Diagnostic strategies
    - Testing hardware
    - Servicing electronic steering systems
4. Electronic suspension
    - Operation
    - System types
    - Components
    - System strategies
5. Electronic suspension diagnosis and testing
    - Diagnostic strategies
    - Testing hardware
    - System strategies
    - Servicing electronic suspension systems
6. Multiplexing of steering and suspension
    - Protocols
    - Diagnosis

Perform diagnostic routines associated with electronic steering and suspension concerns.

Use specialized tools and service equipment associated with electronic steering and suspension diagnosis and repair.

Perform repair and adjustment procedures as specified in electronic service manual.

Diagnose a system fault which has generated a fault code.

Perform a wheel alignment and determine if any geometry errors are present.

Mathematically manipulate suspension geometry values to determine if service is/will be required.

Demonstrate an understanding of the role of balanced and unbalanced forces on linear or rotating vehicle assemblies.

Explain the relationship of inertial and centrifugal-centripetal forces and vehicle dynamics.

Compose complete and accurate paragraphs that include information regarding symptoms, diagnosis results, and appropriate details when preparing warranty claims and information for inclusion on work orders.

Write warranty reports and work orders to include information regarding problems resolution, and the result of the work performed.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Lab workstations, quizzes and a written final examination. Measurable objectives will be evaluated by the instructor based on the accuracy and proficiency of completion.

General Course Requirements and Recommendations
Students must take notes on demonstrations, carefully read and analyze assigned course materials and perform exercises to determine their competence in servicing modern electronic steering and suspension systems.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for AUTO 165

AUTO181 - Technical Automotive Welding

Overview

Subject
Automotive Technology

Academic Department
Automotive Technology

School
Business, Entrepreneurshp, PD

Course Description
An entry-level welding course in electric welding processes and cutting processes relating to the repair and maintenance of the automobile.

Credit Hours
4

Total Contact Hours

Total Instructor Contact Hours:
62

Total Student Contact Hours:
62

Course Fee
35

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Basic Welding Safety
2. Metal Identification Processes
3. Basic Oxy/Fuel Cutting
4. Plasma Arc Cutting
5. Shielded Metal Arc Welding
6. Gas Metal Arc Welding
7. Gas Tungsten Arc Welding
8. Basic Welding Safety

Setup and adjust gas cutting station.

Setup and adjust SMAW welding station.

Setup and adjust GMAW welding station.

Setup and adjust GTAW welding station.

Evaluate weld quality.

Perform satisfactorily weldments on steel.

Cut steel and aluminum using plasma torch.

Cut steel using oxy/fuel torch.

Evaluate weld quality by visual inspection.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Quizzes, and a written final examination. Measurable objectives will be evaluated on the basis of instructor evaluations for lab activities.

General Course Requirements and Recommendations
Students must take notes on demonstrations, carefully read and analyze assigned course materials, and perform exercises to determine their competence in performance of basic automotive service tasks.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for AUTO 181

AUTO190 - Co-op in Automotive Technology

Overview

Subject
Automotive Technology

Academic Department
Automotive Technology

School
Business, Entrepreneurshp, PD

Course Description
Cooperative education is a structured method of combining classroom-based education with practical work experience. A cooperative education experience, commonly known as a "co-op," provides academic credit for structured employment experience. Work experience must be directly related to the student's declared major to be eligible.To register for this course, a student must have completed 50% of core coursework, maintain an overall GPA of 2.0 and a program specific GPA of 2.5.

Credit Hours
1

Total Contact Hours

Total Instructor Contact Hours:
3

Total Student Contact Hours:
75

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
Student will submit a formal request in writing to the faculty and Associate Dean for work experience to be considered for Credit for Prior College-Level Learning.

The student will complete an interview, a reflective paper, or a presentation to the faculty in which the student develops and describes the learning objectives supported by the work experience, how those learning objectives were achieved and how that learning was put into practice.

Finally, the student must also provide a portfolio (or something comparable) that shows the work completed, and provide some form of documentation confirming the work experience (a resume does not suffice) for which Credit for Prior College-Level Learning is requested.

Goals, Topics, and Objectives

Course Goals
Cooperative education helps students make the school-to-work transition, develop career and program-related learning objectives, and work on applicable skills for employment. Placements should provide students with the opportunity to apply and expand upon knowledge learned in the classroom, and develop the skills acquired in their coursework to align with the standards and expectations set by the worksite.

Core Course Topics

1. Core Career-Focused Topics

   A. Professional Dress and Demeanor (attitude, posture, courteousness)

   B. Workplace Communication

   C. Interviewing Skills

   D. Resume Building

   E. Networking and Social Media

   F. Seeking Employment

   G. Career Advancement

Build a resume that meets standards of Career Services Officer.
Articulate the reasons for professional attire
Wear professional attire while on the worksite.
Attend career workshop in professional dress.
Display appropriate professional attitude and demeanor while on the worksite.
Interview effectively
Attend mock interview, give appropriate answers to five 5 questions.
Complete a written job application in a prompt, professional manner with all information legible, error-free, and thorough.
Display understanding of the appropriate use of Social Media sites (Facebook, LinkedIn, and Twitter) during Career Services workshop.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment will be determined by the instructor based on what is in the best interest of the student's academic growth, including future employability of the student. Assessment may include, but isn't limited to: - Major final project - Weekly journal - Creation and attainment of all learning objectives - Participation in a career-focused workshop - Consistent and prompt attendance at worksite - Employer evaluation

General Course Requirements and Recommendations
To be determined by the instructor. A detailed course syllabi for each section of AUTO190 Co-op in Automotive Technolog offered will be presented to the School of Business, Entrepreneurship, and Professional Development and Curriculum Committee "For Information Only" by the mid-semester point of the term the course is offered.

Texts
None

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for AUTO 190

AUTO191 - Coordinated Education Experience Auto 1

Overview

Subject
Asset Program

Academic Department
Automotive Technology

School
Business, Entrepreneurshp, PD

Course Description
Designed to offer practical work experience within the Automotive Technology and Service field through participation in a supervised coordinated education program. This course integrates work experience with classroom and Lab instruction.

Course Pre-requisite(s)
Requires permission from ASSET Program Coordinator

Course Co-requisite(s)
AUTO102 Auto Fund&Dealership Operatio, AUTO108 Basic Auto Elec, AUTO135 Mathematics for the Technician, AUTO160 Auto Chassis Units

Credit Hours
2

Total Contact Hours

Total Instructor Contact Hours:
60

Total Student Contact Hours:
320

Academic Level
Undergraduate

Goals, Topics, and Objectives

Course Goals
Coordinated education helps students make the school-to-work transition, develop career objectives, and work on applicable skills for their career. Sponsoring dealerships should provide students with the opportunity to apply and expand upon knowledge learned in the classroom, and develop the skills acquired in their coursework to align with the standards and expectations set by the students' dealership management.

Core Course Topics

1. Professional Dress and Demeanor (attitude, posture, courteousness).
2. Workplace Communication.
3. Work with Mentor Technicians
4. Documentation of tasks assigned
5. Tracking of flat rate hours
6. Dealership Operations

Properly wear the assigned dealership uniform, be courteous to colleagues, supervisors, and customers in daily interactions, and maintain a positive attitude.
Communicate with colleagues (other technicians, service advisors, parts department personnel), supervisors, and customers in a clear and respectful way.
Work with assigned mentor technicians in the areas covered in the classroom session prior to the co-op.
These areas include basic electrical, basic brakes, noise/vibration/ harshness, maintenance, and basic steering and suspension.
Document all repairs performed on the Ford Co-op log sheets.
List the date, repair order number, what the vehicle came in for, and what the resolution to the concern was.
Track the flat-rate hours of each repair on the co-op log sheets so that you have a record of the number of hours turned each day and each week.
Display an understanding of dealership operations, technician's warranty responsibilities, and correct/complete repair order documentation.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment will be determined by the instructor based on completion of the co-op logs, and the co-op evaluation form completed by the student's dealership service manager.

Grading Scale
A-E

Texts
No textbooks required.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for AUTO 191

AUTO192 - Coordinated Education Experience Auto 2

Overview

Subject
Asset Program

Academic Department
Automotive Technology

School
Business, Entrepreneurshp, PD

Course Description
Designed to offer practical work experience within the Automotive Technology and Service field through participation in a supervised coordinated education program. This course integrates work experience with classroom and lab instruction.

Course Pre-requisite(s)
Requires permission of ASSET Program Coordinator

Course Co-requisite(s)
AUTO105 Internal Combustion Engines, AUTO110 Auto Elect, AUTO131 Auto Ignition Systems, and AUTO162 ABS Brakes.

Credit Hours
2

Total Contact Hours
Total Instructor Contact Hours:
60

Total Student Contact Hours:
320

Academic Level
Undergraduate

Goals, Topics, and Objectives

Course Goals
Coordinated education helps students make the school-to-work transition, develop career objectives, and work on applicable skills for their career. Sponsoring dealerships should provide students with the opportunity to apply and expand upon knowledge learned in the classroom, and develop the skills acquired in their coursework to align with the standards and expectations set by the students' dealership management.

Core Course Topics

1. Professional dress and demeanor (attitude, posture, courteousness)
2. Workplace communication.
3. Work with Mentor Technicians
4. Documentation of tasks assigned
5. Tracking of flat rate hours
6. Dealership Operations

Properly wear the assigned dealership uniform, be courteous to colleagues, supervisors, and customers in daily interactions, and maintain a positive attitude.

Communicate with colleagues (other technicians, service advisors, parts department personnel), supervisors, and customers in a clear and respectful way.

Work with assigned mentor technicians in the areas covered in the classroom session prior to the co-op.

These areas include engine repair, electrical/electronics, ABS/traction control/stability control, engine performance.

Document all repairs performed on the Ford Co-op log sheets.

List the date, repair order number, what the vehicle came in for, and what the resolution to the concern was.

Track the flat-rate hours of each repair on the co-op log sheets so that you have a record of the number of hours turned each day and each week.

Display an understanding of dealership operations, technician's warranty responsibilities, and correct/complete repair order documentation.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment will be determined by the instructor based on completion of the co-op logs, and the co-op evaluation form completed by the student's dealership service manager.

Grading Scale
A-E

Texts
No textbooks required.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for AUTO 192

AUTO215 - Automotive Engine Dynamometer

Overview

Subject
Automotive Technology

Academic Department
Automotive Technology

School
Business, Entrepreneurshp, PD

Course Description
An advanced-level course in the purpose, construction, and operation of the automotive engine dynamometer. Presents how to conduct engine tests of horsepower and torque, and covers test cell setup of various sensor types and adaptation.

Course Pre-requisite(s)
AUTO105 Internal Combustion Engines, AUTO121 Elec Fuel & Emissions Control, and AUTO131 Auto Ignition Systems or Instructor Permission

Credit Hours
2

Total Contact Hours
Total Instructor Contact Hours:
32

Total Student Contact Hours:
32

Course Fee
35

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Basic Engine Operation Overview
2. Terms
3. Formulas - HP, Torque, Friction Loss, Vapor Pressure/Atmospheric Pressure/Temp, etc.
4. Types of Dynamometers
5. Safety Procedures
6. Instrumentation of Engine/Measurement Systems
7. Computer Operation
8. Operation of Dynamometer
9. Test Procedures
10. Data Analysis
11. Data usage and determining effects of change

Analyze engine parameters which affect torque output.

Rescale and manipulate basic raw data from dynamometer tests.

Develop a test to measure basic signal conditioning.

Compare multiple sources of data used to derive calibrations.

Fit lines and curves to correct data.

Correct data to standard scaling.

Calculating and deriving horsepower and Torque.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Measurable objectives will be evaluated by the instructor based on accuracy and proficiency and completion of assigned tasks. Homework, class participation, lab activities, quizzes and tests will be used as criteria to assign the student's final earned grade for this class.

General Course Requirements and Recommendations
Students must take notes on demonstrations, carefully read and analyze assigned course materials, and perform exercises to determine their competence in servicing modern dynamometer test systems.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for AUTO 215

AUTO216 - Chassis Dynamometer

Overview

Subject
Automotive Technology

Academic Department
Automotive Technology

School
Business, Entrepreneurshp, PD

Course Description
An advanced-level course in the purpose, construction and operation of the automotive chassis dynamometer. Demonstrates how to conduct vehicle tests of horsepower and torque, and covers setup of various sensor types and adaptation. Including how to correctly place and secure a vehicle on the dynamometer, how to instrument the vehicle, how to set up and run tests on the vehicle, how to log data, and how to interpret that data. Successful completion of this course will prepare the student for working in the field using dynamometers for OEM manufacturers and 3rd party R&D suppliers.

Course Pre-requisite(s)
AUTO105 Internal Combustion Engines, AUTO121 Elec Fuel & Emissions Control, and AUTO131 Auto Ignition Systemsor Instructor Permission

Credit Hours
2

Total Contact Hours
Total Instructor Contact Hours:
32

Total Student Contact Hours:
32

Course Fee
35

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Basic Engine Operation Overview
2. Terms
3. Formulas- HP, Torque, Friction Loss, Vapor Pressure/ Atmospheric Pressure/ Temp, ect.
4. Types of Dynamometers
5. Safety Procedures
6. Instrumentation of Engine/ Measurement Systems
7. Computer Operation
8. Operation of Dynamometer
9. Test Procedures
10. Data Analysis
11. Data usage and Determining effects on Change.
12. Emission testing and green state laws (FTP testing) Federal Test Procedures.

Analyze engine parameters which affect torque output.

Demonstrate proper vehicle loading/unloading on dynamometer

Rescale and manipulate basic raw data from dynamometer tests.

Develop a test to measure basic signal conditioning.

Compare multiple sources of data used to derive calibrations.

Fit lines and curves to correct data.

Correct data to standard scaling.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Measurable objectives will be evaluated by the instructor based on accuracy and proficiency and completion of assigned tasks.Homework, class participation, lab activities, quizzes and tests will be used as criteria to assign the student's final earned grade for this class.

General Course Requirements and Recommendations
Students must take notes on demonstrations, carefully read and analyze assigned course materials and perform exercises to determine their competence in servicing modern automotive chassis dynamometer systems.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for AUTO 216

AUTO224 - Automotive Air Conditioning

Overview

Subject
Automotive Technology

Academic Department
Automotive Technology

School
Business, Entrepreneurshp, PD

Course Description
Studies automotive air conditioning systems, including components, functions, and types of service equipment. Also discusses safety protocols and environmental regulations. Course is for ASSET students.

Credit Hours
2

Total Contact Hours
Total Instructor Contact Hours:
32

Total Student Contact Hours:
32

Course Fee
35

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Principles of the air conditioning system.
2. Types of systems.
3. Major components and their function.
4. A/C sensors and controls.
5. General system service.
6. Safety and environmental regulations.
7. Types of A/C system service equipment.

Perform cooling system cap and recovery system tests (pressure, combustion leakage and temperature); determine necessary action.

Leak test A/C system; determine necessary action.

Inspect A/C condenser for airflow restrictions; perform necessary action.

Identify (by label application or use of a refrigerant identifier) and recover A/C system refrigerant.

Recycle refrigerant.

Evacuate and charge A/C system.

Retrieve DTCs from control head and PCM.

Diagnose refrigeration, heating, air management and control subsystem concerns.

Diagnose electronic cooling fan and compressor clutch concerns.

Diagnose climate controlled seating concerns.

Diagnose rear heating and air conditioning concerns.

Diagnose dual zone concerns.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Lab workstations, quizzes and a written final examination. Measurable objectives will be evaluated by the instructor based on the accuracy and proficiency of objective completion.

General Course Requirements and Recommendations
Students must take notes on demonstrations, carefully read and analyze assigned course materials and perform exercises to determine their competence in servicing modern air conditioning systems.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for AUTO 224

AUTO225 - Automotive Air Conditioning

Overview

Subject
Automotive Technology

Academic Department
Automotive Technology

School
Business, Entrepreneurshp, PD

Course Description
A beginning course covering basic refrigeration and automotive heating, ventilation, air management, and air conditioning systems. Emphasizes identification of systems, diagnosis, repair, and responsible handling of common automotive refrigerants.

Credit Hours
2

Total Contact Hours
Total Instructor Contact Hours:
32

Total Student Contact Hours:
32

Course Fee
35

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Air Conditioning Systems
2. System Service
3. Recover and recycle referigerant
4. Evaluate system performance with a manifold gauge set.
5. Perform electrical and mechanical tests on HVAC controls.
6. Heater (cooling) System

Perform cooling system cap and recovery system tests, determine necessary action.

Leak test A/C system; determine necessary action.

Inspect A/C condenser for airflow restrictions; perform necessary action.

Remove and install expansion valve or orifice (expansion) tube. Identify (by label application or use of a refrigerant identifier) and recover A/C system refrigerant.

Recycle refrigerant.

Identify the two common expansion type automotive A/C systems.

Identify refrigerant type and purity.

Describe basic refrigeration theory.

Describe effects of automotive refrigerant on the environment.

Demonstrate touch test to evaluate system performance.

Analyze system performance decide state of charge form gauge readings. Use stand alone and scan tool diagnostics to view faults and actuate outputs.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Measurable objectives will be evaluated by the instructor based on accuracy and proficiency and completion of assigned tasks. Homework, class participation, lab activities, quizzes and tests will be used as criteria to assign the student's final earned grade for this class.

General Course Requirements and Recommendations
Students must take notes on demonstrations, carefully read and analyze assigned course materials, and perform exercises to determine their competence in servicing modern vehicle air conditioning systems.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for AUTO 225

AUTO230 - Automotive Diesel Principles

Overview

Subject
Automotive Technology

Academic Department
Automotive Technology

School
Business, Entrepreneurshp, PD

Course Description
Explains the operating principles of the four-stroke diesel engine used in the automobile, including the construction, service, and diagnosis of the various engine systems. Laboratory activities.

Course Pre-requisite(s)
AUTO105 Internal Combustion Engines or Instructor Permission

Credit Hours
2

Total Contact Hours
Total Instructor Contact Hours:
32

Total Student Contact Hours:
32

Course Fee
35

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Diesel Engine Principles
2. Diesel vs. Gasoline Comparison (engines / components)
3. Diesel Fuel Properties
4. Theory of ignition
5. Clean Diesel Technology, Lowering Nox and PM Levels
6. Supercharger Types and Operating Principles
7. Diagnosis and Service

Disassemble, measure, analyze components, reassemble Diesel engines.

Sketch, label and define the Diesel engine components.

Locate and identify components on Diesel engines.

Describe the operation of Diesel emission control devices.

Describe the construction and operation of Supercharging / Turbocharging devices.

Identify proper fuel for various operating conditions.

Explain compression ignition and its application to the 4 stroke cycle.

Explain the need for emission related components.

Describe service and maintenance required for emission related devices.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Measurable objectives will be evaluated by the instructor based on accuracy and proficiency and completion of assigned tasks. Homework, class participation, lab activities, quizzes and tests will be used as criteria to assign the student's final earned grade for this class.

General Course Requirements and Recommendations
Students must take notes on demonstrations, carefully read and analyze assigned course materials and perform exercises to determine their competence in servicing modern diesel power systems.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for AUTO 230

AUTO231 - Diesel Engine Performance & Diagnosis

Overview

Subject
Automotive Technology

Academic Department
Automotive Technology

School
Business, Entrepreneurshp, PD

Course Description
Offers a comprehensive overview of the operating principles of the diesel engine, including the construction, service, and diagnosis of the various engine systems and sub-systems. Covers the latest technological advancements in electronic fuel delivery systems, their diagnosis, and service along with the most recent advances in diesel fuel and Bio-diesel technology. Extensive laboratory activities.

Credit Hours
4

Total Contact Hours
Total Instructor Contact Hours:
62

Total Student Contact Hours:
62

Course Fee
30

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Diesel Fundamentals
2. Cooling and Lubrication
3. Diesel Fuel Systems
4. Electrical / Electronics
5. Air Induction Systems
6. Diesel Engine Management
7. Base Engine Testing
8. Emission Controls
9. Electronic Engine Controls Diagnosis

Explain the major differences between gasoline and diesel engines. Interpret engine noise; determine course of action.

Observe engine exhaust smoke color, opacity and quantity; determine needed action.

Diagnose causes of engine fuel, oil, coolant, air and other leaks; determine course of action.

Diagnose no cranking, cranks but fails to start, hard starting and starts but does not continue to run problems; determine needed action.

Interface with vehicle's on-board computer; perform diagnostic procedures using recommended electronic diagnostic equipment and tools; determine course of action.

Locate and use relevant service information for diagnostic procedures, flow charts and wiring diagrams.

Inspect and test sensors, controls, actuator components and circuits; service as needed.

Retrieve DTCs using scan tools and identify the relationships between DTCs and failures that cause them.

Navigate between multiple electronic service publications, Wiring Diagrams and Workshop Manuals while following diagnostic subroutines.

Disassemble and reassemble select fuel system components using the correct tools and service procedure.

Visually inspect components such as cylinders, fuel injectors and turbochargers for failures.

Identify components, describe their function, identify and perform diagnostics, service and maintenance for this Diesel sub-system.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Homework, quizzes and a written final examination. Measurable objectives will be evaluated by the instructor based on the accuracy and proficiency of objective completion.

General Course Requirements and Recommendations
Students must take notes on demonstrations, carefully read and analyze assigned course materials and perform exercises to determine their competence in diagnosing servicing modern electronically controlled diesel engine systems.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for AUTO 231

AUTO237 - Comput Engine/Veh Netwrk, Prg, & Sec Sys

Overview

Subject
Automotive Technology

Academic Department
Automotive Technology

School
Business, Entrepreneurshp, PD

Course Description
Explains the operating of vehicle communication networks. Emphasis in vehicle network faults (CAN+, CAN-, shorts, opens and other circuit faults) and their diagnosis and repair. Perform vehicle module programming using different vehicle software and interfaces. Explains vehicle network security protocols and vehicle hacking protection. Also, examines autonomous over-the-air vehicle communications and updating.

Credit Hours
2

Total Contact Hours
Total Instructor Contact Hours:
62

Total Student Contact Hours:
62

Course Fee
35

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Vehicle network, construction and topology
2. Multiplexing
3. Vehicle anti-theft, immobilization and external control systems
4. Network diagnosing
5. Over The Air Controller monitoring and updating
6. Vehicle Smart Gateway systems
7. Malicious Vehicle network security intrusion
8. Manufacture security credentials
9. Autonomous/ semi-autonomous vehicle control infrastructure

Properly diagnose network communication faults.

Explain CAN BUS networks.

Properly program various modules on a vehicle.

Demonstrate competency using scan tools and other vehicle communication software.

Use of network breakout box

Monitor internal and external networks using digital oscilloscope

Use OEM enhanced diagnostic equipment on a secure vehicle network

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Measurable objectives will be evaluated by the instructor based on accuracy and proficiency and completion of assigned tasks. Homework, class participation, lab activities, quizzes and tests will be used as criteria to assign the student's final earned grade for this class.

General Course Requirements and Recommendations
Students must take notes on demonstrations, carefully read and analyze assigned course materials and perform exercises to determine their competence in servicing vehicle network and security systems.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for AUTO 237

AUTO260 - Hybrid and Electric Vehicle Systems

Overview

Subject
Automotive Technology

Academic Department
Automotive Technology

School
Business, Entrepreneurshp, PD

Course Description
An intermediate-level course covering hybrid and electric vehicle systems. Includes environmental impact of internal combustion engines (ICE). Also, includes theory of operation and service of electric propulsion systems, with emphasis on safety issues and concerns regarding the servicing of these systems. Also, covers hybrid system safety, hybrid systems in general (both series and parallel), plug-in hybrids, electric vehicles including battery types and fuel cell vehicles. High- voltage battery types, environmental impact, construction, and diagnosis.

Course Pre-requisite(s)
AUTO110 Auto Elect or Instructor Permission

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
62

Total Student Contact Hours:
62

Course Fee
35

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Traction motor design and operation
2. Fuel Cells
3. General characteristics and applications of primary and secondary batteries
4. High-voltage batteries
5. High voltage safety, handling and service equipment
6. Power and energy for electric, hybrid, and plug-in vehicle propulsion
7. High voltage converters and inverters
8. Levels of charging for electric and plug-in hybrid vehicles
9. Regenerative Braking Systems

Distinguish and recognize the components of batteries, the classification for types of batteries, and the applications for determining battery usage.

Recognize and identify safety concerns regarding high voltage systems.

Demonstrate the proper safety equipment and service procedures required for servicing HV vehicles.

Diagnosis a loss of isolation in the high voltage system of the vehicle.

Identify and describe the function of high voltage converters and inverters.

Describe the differences in levels of chargers for electric vehicles.

Test battery SOC and SOH and determine serviceability.

Disassemble High Voltage battery components.

Diagnose regenerative braking system concern.

Describe the functionality of Hydrogen Fuel Cell Vehicles.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Quizzes, tests and written final examination. Measurable objectives will be evaluated by the instructor based on the accuracy and proficiency of objective completion.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for AUTO 260

AUTO262 - Electronic Automotive Chassis

Overview

Subject
Automotive Technology

Academic Department
Automotive Technology

School
Business, Entrepreneurshp, PD

Course Description
This course is a study of electronic braking and chassis systems. Examines controller networks as they apply to steering, suspension, and braking systems. Explores computerized vehicle stability systems and components.

Course Pre-requisite(s)
AUTO160 Auto Chassis Units or instructor permission

Credit Hours
2

Total Contact Hours
Total Instructor Contact Hours:
62

Total Student Contact Hours:
62

Course Fee
35

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Chassis system network structure and topology
2. Braking system network structure and topology
3. Electronic braking system principles, components and operation
4. Electronic parking brake operation, diagnosis and service
5. On-car machining brake rotors
6. Electro-hydraulic braking systems
7. Electro-mechanical braking systems
8. Variable ratio electronic steering system operation, diagnosis and service
9. Vehicle stability system operation

Perform steering system module software update and configuration.

Perform electronic brake control module update and configuration.

Access vehicle electronic chassis and braking system network with diagnostic tool.

Diagnose and service electronic parking brake system.

Perform on-car brake rotor machining.

Perform brake bleeding operation on computer controlled braking system.

Monitor and record data from computer-controlled steering and suspensions systems.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Measurable objectives will be evaluated by the instructor based on accuracy and proficiency and completion of assigned tasks. Homework, class participation, lab activities, quizzes and tests will be used as criteria to assign the student's final earned grade for this class.

General Course Requirements and Recommendations
Students must take notes on demonstrations, carefully read and analyze assigned course materials and perform exercises to determine their competence in servicing electronic automotive chassis systems.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for AUTO 262

AUTO290 - Co-op in Automotive Technology

Overview

Subject
Automotive Technology

Academic Department
Automotive Technology

School
Business, Entrepreneurshp, PD

Course Description
Cooperative education is a structured method of combining classroom-based education with practical work experience. A cooperative education experience, commonly known as a "co-op," provides academic credit for structured employment experience. Work experience must be directly related to the student's declared major to be eligible.To register for this course, a student must have completed 50% of core coursework, maintain an overall GPA of 2.0 and a program specific GPA of 2.5.

Course Pre-requisite(s)
Permission from Career Services Officer or Job Developer in the Office of Career Services

Credit Hours
2

Total Contact Hours

Total Instructor Contact Hours:
3

Total Student Contact Hours:
150

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
Student will submit a formal request in writing to the faculty and Associate Dean for work experience to be considered for Credit for Prior College-Level Learning.

The student will complete an interview, a reflective paper, or a presentation to the faculty in which the student develops and describes the learning objectives supported by the work experience, how those learning objectives were achieved and how that learning was put into practice.

Finally, the student must also provide a portfolio (or something comparable) that shows the work completed and provide some form of documentation confirming the work experience (a resume does not suffice) for which Credit for Prior College-Level Learning is requested.

Goals, Topics, and Objectives

Course Goals
Cooperative education helps students make the school-to-work transition, develop career and program-related learning objectives, and work on applicable skills for employment. Placements should provide students with the opportunity to apply and expand upon knowledge learned in the classroom, and develop the skills acquired in their coursework to align with the standards and expectations set by the worksite.

Core Course Topics

1. Core Career-Focused Topics:

   A. Professional Dress and Demeanor (attitude, posture, courteousness)
   B. Workplace Communication
   C. Interviewing Skills
   D. Resume Building
   E. Networking and Social Media
   F. Seeking Employment
   G. Career Advancement

Build a resume that meets standards of Career Services Officer
Articulate the reasons for professional attire.
Wear professional attire while on the worksite.
Attend career workshop in professional dress.
Display appropriate professional attitude and demeanor while on the worksite.
Interview effectively. Attend mock interview, give appropriate answers to five 5 questions.
Complete a written job application in a prompt, professional manner with all information legible, error-free, and thorough.
Display understanding of the appropriate use of Social Media sites (Facebook, LinkedIn, and Twitter) during Career Services workshop.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment will be determined by the instructor based on what is in the best interest of the student's academic growth, including future employability of the student. Assessment may include, but isn't limited to: - Major final project - Weekly journal - Creation and attainment of all learning objectives - Participation in a career-focused workshop - Consistent and prompt attendance at worksite - Employer evaluation

General Course Requirements and Recommendations
To be determined by the instructor. A detailed course syllabi for each section of AUTO 290 offered will be presented to the School of BEPD and Curriculum Committee "For Information Only" by the mid-semester point of the term the course is offered.

Texts
None

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for AUTO 290

AUTO291 - Coordinated Education Experience Auto 3

Overview

Subject
Asset Program

Academic Department
Automotive Technology

School
Business, Entrepreneurshp, PD

Course Description
Designed to offer practical work experience within the Automotive Technology and Service field through participation in a supervised coordinated education program. This course integrates work experience with classroom and Lab instruction.

Course Pre-requisite(s)
Requires permission from the ASSET Program Coordinator

Course Co-requisite(s)
AUTO140 Auto Transmission, AUTO150 Automotive Diag & Engine Eval , and AUTO160 Auto Chassis Units

Credit Hours
2

Total Contact Hours

Total Instructor Contact Hours:
60

Total Student Contact Hours:
320

Academic Level
Undergraduate

Goals, Topics, and Objectives

Course Goals
Coordinated education helps students make the school-to-work transition, develop career objectives, and work on applicable skills for their career. Sponsoring dealerships should provide students with the opportunity to apply and expand upon knowledge learned in the classroom, and develop the skills acquired in their coursework to align with the standards and expectations set by the students' dealership management.

Core Course Topics

1. Professional Dress and Demeanor (attitude, posture, courteousness).
2. Workplace Communication.
3. Work with Mentor Technicians
4. Documentation of tasks assigned.
5. Tracking of flat rate hours.
6. Dealership Operations

Properly wear the assigned dealership uniform, be courteous to colleagues, supervisors, and customers in daily interactions, and maintain a positive attitude.
Communicate with colleagues (other technicians, service advisors, parts department personnel), supervisors, and customers in a clear and respectful way.
Work with Mentor Technicians Work with assigned mentor technicians in the areas covered in the classroom session prior to the co-op.
These areas include automatic transmission service, engine and engine performance diagnosis, and electronic steering and suspension.
Document all repairs performed on the Ford Co-op log sheets.
List the date, repair order number, what the vehicle came in for, and what the resolution to the concern was.
Track the flat-rate hours of each repair on the co-op log sheets so that you have a record of the number of hours turned each day and each week.
Display an understanding of dealership operations, technician's warranty responsibilities, and correct/complete repair order documentation.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment will be determined by the instructor based on completion of the co-op logs, and the co-op evaluation form completed by the student's dealership service manager.

Grading Scale
A-E

Texts
No textbooks required.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for AUTO 291

AUTO292 - Coordinated Education Experience Auto 4

Overview

Subject
Asset Program

Academic Department
Automotive Technology

School
Business, Entrepreneurshp, PD

Course Description
Designed to offer practical work experience within the Automotive Technology and Service field through participation in a supervised coordinated education program. This course integrates work experience with classroom and Lab instruction.

Course Pre-requisite(s)
Requires permission from the ASSET Program Coordinator

Course Co-requisite(s)
AUTO142 Auto Tran Cntrl Diagnosis, AUTO145 Manual Trans & Driveline, AUTO231 Diesel Eng Perf & Diagnosis, and AUTO237 Comp Eng/Veh Ntwk, Prg, Sec Sy

Credit Hours
2

Total Contact Hours
Total Instructor Contact Hours:
60

Total Student Contact Hours:
320

Academic Level
Undergraduate

Goals, Topics, and Objectives

Course Goals
Coordinated education helps students make the school-to-work transition, develop career objectives, and work on applicable skills for their career. Sponsoring dealerships should provide students with the opportunity to apply and expand upon knowledge learned in the classroom, and develop the skills acquired in their coursework to align with the standards and expectations set by the students' dealership management.

Core Course Topics
1. Professional Dress and Demeanor (attitude, posture, courteousness).
2. Workplace Communication.
3. Work with Mentor Technicians
4. Documentation of tasks assigned.
5. Tracking of flat rate hours.
6. Dealership Operations

Properly wear the assigned dealership uniform, be courteous to colleagues, supervisors, and customers in daily interactions, and maintain a positive attitude.

Communicate with colleagues (other technicians, service advisors, parts department personnel), supervisors, and customers in a clear and respectful way.

Work with Mentor Technicians Work with assigned mentor technicians in the areas covered in the classroom session prior to the co-op.

These areas include automatic transmission service, engine and engine performance diagnosis, and electronic steering and suspension.

Document all repairs performed on the Ford Co-op log sheets.

List the date, repair order number, what the vehicle came in for, and what the resolution to the concern was.

Track the flat-rate hours of each repair on the co-op log sheets so that you have a record of the number of hours turned each day and each week.

Display an understanding of dealership operations, technician's warranty responsibilities, and correct/complete repair order documentation.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment will be determined by the instructor based on completion of the co-op logs, and the co-op evaluation form completed by the student's dealership service manager.

Grading Scale
A-E
Texts
No textbooks required.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for AUTO 292

AUTO293 - Auto Technology Service Experience Lab I

Overview

Subject
Automotive Technology

Academic Department
Automotive Technology

School
Business, Entrepreneurshp, PD

Course Description
Provides real world work experiences and develops entry-level skills in diagnosis and repair of basic engine service, basic electrical, brake systems, suspension systems, and steering systems. Also covers general preventative maintenance procedures such as oil changes and tire rotation. Laboratory activities.

Course Pre-requisite(s)
AUTO105 Internal Combustion Engines, AUTO110 Auto Elect, and AUTO160 Auto Chassis Units or department permission

Credit Hours
4

Total Contact Hours
Total Instructor Contact Hours:
124

Total Student Contact Hours:
124

Course Fee
35

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics
1. Completing and documenting a repair order.
2. Multi-point inspections
3. Electrical system service
4. Comprehensive tire service
5. Brake system service
6. Steering and suspension system servive
7. Base engine service

Proper completion of work order and documentation of repair.

Completed parts needed inventory and order request.

Demonstrate a preventative maintenance procedure and complete multi-point inspection sheet.

Diagnose a base brake hydraulic concern.

Assess overall brake system condition and determine course of service.

Diagnose suspension system concern.

Assess overall steering and suspension system condition and determine proper course of action.

Diagnose tire, wheel and alignment concern and corrective action required.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Homework, quizzes, lab reports and a final examination. Measurable objectives will be evaluated by the instructor based on the accuracy and proficiency of objective completion.

General Course Requirements and Recommendations
- Complete at least 95% of all the Priority 1 (P-1) items listed in the NATEF Task List for areas: Brakes, Suspension & Steering, Base Engine and Electrical.
- Complete at least 80% of all the Priority 2 (P-2) items listed in the NATEF Task List for areas: Brakes, Suspension & Steering, Base Engine and Electrical.
- Complete at least 50% of all the Priority 3 (P-3) items listed in the NATEF Task List for areas: Brakes, Suspension & Steering, Base Engine and Electrical.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for AUTO 293

AUTO294 - Auto Technology Serv Experience Lab II

Overview

Subject
Automotive Technology

Academic Department
Automotive Technology

School
Business, Entrepreneurshp, PD

Course Description
Explores diagnosis and repair of major engine service, electrical/electronic systems, fuel/emission systems, ignition/engine control systems, ABS/traction control systems, active suspension systems, manual transmission, automatic transmission, driveline, and HVAC systems.

Course Pre-requisite(s)
AUTO105 Internal Combustion Engines, AUTO110 Auto Elect, AUTO120 Auto Fuel Management Systems, AUTO150 Automotive Diag & Engine Eval, and AUTO160 Auto Chassis Units or department permission

Credit Hours
4

Total Contact Hours

Total Instructor Contact Hours:
124

Total Student Contact Hours:
124

Course Fee
35

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Anti-lock braking system (ABS) and traction control systems.
2. Active steering and suspension system.
3. Stability assist.
4. A/C systems-CCOT and TXV.
5. OBD2 monitors.
6. Engine control and fuel injection.
7. Engine rebuilding-replacement.
8. Automobile transmission service.

Explain the basic operation of an ABS system.

Identify and compare the different types of ABS and traction systems used on various automobiles.

Navigate the workshop electronic publication necessary to diagnose an ABS/traction control fault.

Perform a PPT test and take the appropriate actions.

Bleed the ABS system utilizing the NGS, WDS, IDS or Genysis service units.

Identify traction control system components and differentiate from ABS function.

Measure and/or test with meters and measuring instruments for English or metric measurements, then convert the results to the manufacturer's specifications.

Write service and work order to include information regarding problem resolution and the result of the work performed.

Perform diagnostic routines associated with electronic steering and suspension concerns.

Use specialized tools and service equipment associated with electronic steering and suspension diagnosis and repair.

Perform a wheel alignment, assess errors in geometry angles.

Diagnose a HVAC concern and determine repair procedure.

Diagnose an NVH concern associated with an engine, suspension, and brake or tire/wheel system.

Diagnose a transmission concern and determine course of action.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Homework, quizzes, lab reports and a final examination. Measurable objectives will be evaluated by the instructor based on the accuracy and proficiency of objective completion.

General Course Requirements and Recommendations
Complete at least 95% of all the Priority 1 (P-1) items listed in the NATEF Task List for areas: Brakes, Suspension & Steering, Base Engine and Electrical/Electronics, Transmission and Driveline, HVAC and NVH.

Complete at least 80% of all the Priority 2 (P-2) items listed in the NATEF Task List for areas: Brakes, Suspension & Steering, Base Engine and Electrical/Electronics, Transmission and Driveline, HVAC and NVH.

Complete at least 50% of all the Priority 3 (P-3) items listed in the NATEF Task List for areas: Brakes, Suspension & Steering, Base Engine and Electrical/Electronics, Transmissions and Driveline, HVAC and NVH.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for AUTO 294

AUTO297 - Spec Topics in Automotive Technology

Overview

Subject
Automotive Technology

Academic Department
Automotive Technology

School
Business, Entrepreneurshp, PD

Course Description
This course explores selected topics as determined by the academic department and the instructor with emphasis on current automotive technology trends. Specific special topics are announced together with the prerequisites each term. The student can repeat the course when different topics are offered, earning credit for each different topic. This course may be used toward fulfilling the specific degree requirements for an associate degree or certificate.

Course Pre-requisite(s)
As appropriate

Course Co-requisite(s)
As appropriate

Credit Hours
1

Total Contact Hours

Total Instructor Contact Hours:
16

Total Student Contact Hours:
16

Academic Level
Undergraduate

Goals, Topics, and Objectives

Course Goals
To provide the instructional flexibility needed to address the specific needs of a targeted student population.

Core Course Topics
To be determined by the instructor.

To provide the instructional flexibility needed to address the specific needs of a targeted student population.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
All students will be required to complete a comprehensive final examination that assesses the learning of course objectives. This exam must be weighted in a manner so that this exam score is worth a minimum of fifteen percent of the final course grade. All additional assessment of student achievement is left to instructor discretion.

General Course Requirements and Recommendations
To be determined by the instructor.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for AUTO 297

AUTO298 - Spec Topics in Automotive Technology

Overview

Subject
Automotive Technology

Academic Department
Automotive Technology

School
Business, Entrepreneurshp, PD

Course Description
This course explores selected topics as determined by the academic department and the instructor with emphasis on current automotive technology trends. Specific special topics are announced together with the prerequisites each term. The student can repeat the course when different topics are offered, earning credit for each different topic. This course may be used toward fulfilling the specific degree requirements for an associate degree or certificate.

Course Pre-requisite(s)
As appropriate

Course Co-requisite(s)
As appropriate

Credit Hours
2

Total Contact Hours

Total Instructor Contact Hours:
32

Total Student Contact Hours:
32

Academic Level
Undergraduate

Goals, Topics, and Objectives

Course Goals
To provide the instructional flexibility needed to address the specific needs of a targeted student population
Core Course Topics
To be determined by the instructor.

To be developed by the instructor for each individual offering

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
All students will be required to complete a comprehensive final examination that assesses the learning of course objectives. This exam must be weighted in a manner so that this exam score is worth a minimum of fifteen percent of the final course grade. All additional assessment of student achievement is left to instructor discretion.

General Course Requirements and Recommendations
To be determined by the instructor. Detailed course syllabi for each section of AUTO 298 must be approved by the Technology Division prior to the course being offered. A copy of the specific course syllabi will be presented to the CEC and College Council by the Associate Dean, "For Information Only," at the first meeting after the beginning of the term the course is offered.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for AUTO 298

BAC110 - Practical Accounting

Overview

Subject
Accounting

Academic Department
Business & Economics

School
Business, Entrepreneurshp, PD

Course Description
Offers practical knowledge of bookkeeping principles, including small-business accounting practices. Introduces the accounting cycle, the specialized journals employed by merchandising firms, and payroll accounting.

Course Pre-requisite(s)
ENG131 Introduction College Writing eligible AND (BMA110 Business Math with a C grade or better OR eligible to take gateway MATH courses at HFC, OR satisfactory score on the math placement exam).

Credit Hours
4

Total Contact Hours

Total Instructor Contact Hours:
62

Total Student Contact Hours:
62

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
Other

Goals, Topics, and Objectives

Core Course Topics

1. Double-Entry Accounting System
2. Accrual-Based Accounting and Adjusting Entries
3. Preparation of an End-of-Period, Ten-Column Worksheet
4. Preparation of Financial Statements That Meet GAAP
5. Preparation of Closing Entries and a Post-Closing Trial Balance
6. Application of Basic Payroll Accounting
7. Bank Accounts and Cash Funds

Use a double-entry accounting system to journalize and post business transactions.

Prepare the adjusting entries to recognize revenues, expenses, gains, and losses in conformance with the accrual basis of accounting.

Preparation of an End-of-Period, Ten-Column Worksheet Prepare a ten-column worksheet.

Prepare an Income Statement, Owner's Equity Statement, and Balance Sheet that conform to generally accepted accounting principles (GAAP).

Journalize and post closing entries.

Prepare a post-closing trial balance.

Prepare a payroll register.

Prepare payroll entries for the recording of payroll, payment of payroll, recording of payroll tax expenses, and payment of payroll tax expenses.

Prepare a bank reconciliation and adjusting entries.

Prepare a petty cash fund reconciliation and adjusting entries.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Students will be assessed through testing, quizzes, in-class activities, and outside assignments.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for BAC 110

BAC131 - Introduction to Financial Accounting

Overview

Subject
Accounting

Academic Department
Business & Economics

School
Business, Entrepreneurshp, PD

Course Description
Introduces basic financial accounting principles including the accounting cycle; merchandise accounting; income, asset, and liability measurements; and preparation and evaluation of financial statements.

Course Pre-requisite(s)
ENG131 Introduction College Writing eligible AND (BMA110 Business Math with a C grade or better OR eligible to take gateway MATH courses at HFC, OR satisfactory score on the math placement exam).

Credit Hours
4

Total Contact Hours
Total Instructor Contact Hours:
62

Total Student Contact Hours:
62

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. The Accounting Cycle
2. The Accrual Basis of Accounting
3. Financial Statement
4. Presentation and Interpretation Assumptions, Principles, and Constraints of GAAP
5. Accounting Asset and Current Liability Recognition, Recording, and Analysis
6. Cash Flow Statement

Journalize events in the general journal. Journalize and post adjusting entries.

Journalize and post closing entries.

Prepare a post-closing trial balance.

Compare and contrast accrual and cash basis of accounting.

Prepare a classified balance sheet in conformance with generally accepted accounting principles (GAAP).

Prepare a multi-step income statement in conformance with GAAP.
Prepare a retained earnings statement in conformance with GAAP.

Prepare and analyze a comprehensive stockholder's equity section of a balance sheet.

Calculate the book-value-per-share and earnings-per-share of a corporation that has preferred and common shares of stock outstanding and that holds shares in the treasury.

Discuss Monetary Unit, Economic Entity, Time Period, and Going Concern Assumptions. Discuss Revenue Recognition, Matching, Full Disclosure, and Cost Principles.

Discuss Materiality Constraint.

Apply internal control principles by preparing a bank reconciliation.

Calculate the value of inventory and cost of goods sold using the first in first out (FIFO), last in first out (LIFO), and average cost methods.

Analyze the impact of these methods (FIFO, LIFO, and average cost) on financial statements.

Calculate the value of depreciation expense and book value of plant assets using straight-line, units of activity, and accelerated depreciation methods.

Analyze the impact of these methods on financial statements. Prepare a cash flow statement using the indirect method in conformance with GAAP.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Students will be assessed through tests, quizzes, in-class activities, outside assignments using an online homework management system, and/or class participation.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for BAC 131

BAC132 - Introduction to Managerial Accounting

Overview

Subject
Accounting

Academic Department
Business & Economics

School
Business, Entrepreneurshp, PD

Course Description
Builds on content presented in BAC-131. Covers in-depth financial statement analysis as well as managerial accounting. Also examines cost behavior, cost-volume profit analysis, business planning and accounting controls, and how accounting information is used in managerial decision-making.

Course Pre-requisite(s)
BAC131 Intro to Financial Accounting with a C grade or better

Credit Hours
4

Total Contact Hours
Total Instructor Contact Hours:
62

Total Student Contact Hours:
62

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Financial Statement Analysis
2. Accounting for a Manufacturing Firm
3. Cost-Volume-Profit Analysis and Budgeting

Employ horizontal, vertical, and ratio analysis tools to draw conclusions regarding the liquidity, profitability, and solvency of a given business entity.

Prepare a cost of goods manufactured statement using a job-order cost system.

Prepare a cost of goods manufactured statement using a process cost system.

Compare and contrast process and job-order costing.

Prepare an income statement for a manufacturing firm.

Employ cost-volume-profit analysis to determine the amount of sales (in dollars and units) required for a business enterprise to break even and to attain targeted levels of profit.

Prepare a sales, production, labor, and materials purchase budget for a manufacturing firm.

Analyze variances to evaluate management performance.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Students will be assessed through tests, quizzes, in-class activities,& outside assignments using an online homework management system, and/or class participation.

Grading Scale
Letter Grade Percentage:

- 93-100%=A
- 90% - 92.9%=A-
- 87% - 89.9%=B+
- 83% - 86.9%=B
- 80% - 82.9%=B-
- 77% - 79.9%=C+
- 73% - 76.9%=C
- 70% - 72.9%=C-
- 67% - 69.9%=D+
- 63% - 66.9%=D
- 60% - 62.9%=D-
- <60%=E

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for BAC 132

BAC141 - Computerized Accounting-QuickBooks

Overview

Subject
Accounting

Academic Department
Business & Economics

School
Business, Entrepreneurshp, PD

Course Description
Introduces the QuickBooks computerized-accounting software package. Covers how to design a company's accounting system for financial record keeping and how to enter data for the general journal, special journals, accounts receivable, accounts payable, payroll, and inventory.

Course Pre-requisite(s)
BAC110 Practical Accounting with a C grade or better OR BAC131 Intro to Financial Accounting with a C grade or better OR Instructor Permission

Credit Hours
2

Total Contact Hours

Total Instructor Contact Hours:
32

Total Student Contact Hours:
32

Course Fee
20

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
Other

Goals, Topics, and Objectives

Core Course Topics

1. Introduction to Accounting Software Packages
2. Company File Set-up
3. Transactions
4. Accounts Receivable and Sales
5. Accounts Payable and Purchases
6. Cash Payments and Receipts and Banking
7. Financial Statements
8. Payroll

Explain the purpose of accounting software.

Design a business's accounting system for financial record keeping.

Analyze accounting transactions.

Prepare correcting and adjusting journal entries.

Prepare a schedule of accounts receivable.

Prepare a schedule of accounts payable.

Prepare a bank reconciliation.

Record cash payments and receipts.

Prepare financial statements.

Prepare and enter fiscal year-end closing journal entries.

Prepare payroll schedules and reports.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Student will be assessed through tests, quizzes, assignments, and/or class participation.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for BAC 141

BAC231 - Asset Accounting

Overview

Subject
Accounting

Academic Department
Business & Economics

School
Business, Entrepreneurshp, PD

Course Description
Provides a detailed study of specialized phases of accounting such as the treatment of cash and temporary investments, receivables, inventories, investments, plant and equipment, intangibles, deferred charges, liabilities, and financial statements.

Course Pre-requisite(s)
BAC132 Intro to Managerial Accounting with a C grade or better

Credit Hours
4

Total Contact Hours

Total Instructor Contact Hours:
62

Total Student Contact Hours:
62

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Conceptual Framework of Accounting
2. Income Statement
3. Balance Sheet and Statement of Cash Flows
4. Accounting and Time Value of Money
5. Cash and Receivables
6. Valuation of Inventories
7. Acquisition and Disposal of Property
8. Depreciation, Impairments, and Depletion
9. Intangible Assets

Explain objectives of financial reporting.

Define basic elements of financial statements.

Apply basic principles, constraints, and assumptions when preparing financial statements.

Discuss the content and format of the income statement.

Compute earnings per share, and explain the reporting format of earnings per share.

Prepare a multi-step income statement. Balance Sheet and Statement of Cash Flows.

Prepare a classified statement of financial position.

Prepare a basic statement of cash flows.

Distinguish between simple and compound interest.

Use present value and future value tables.

Solve future and present value of ordinary annuity and annuity-due problems.

Evaluate the realizable value of receivables using the allowance method.

Value notes receivable and related discounts and interest.

Distinguish between perpetual and periodic inventory systems.

Calculate inventory and cost of goods sold using generally accepted accounting methods.

Estimate ending inventory using the gross profit and relative sales value methods.

Value inventory using the lower of cost or market rule. Identify costs to include in initial valuation of property, plant, and equipment.

Calculate capitalized interest. Calculate gain or loss on disposal of assets.

Calculate depreciation and book value using generally accepted accounting methods.

Calculate depletion of natural resources. Evaluate impairment of assets. Identify costs to include in initial valuation of intangible assets.

Calculate amortization and current book value for intangible assets. Calculate goodwill, and determine impairment.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Student will be assessed through tests, quizzes, in-class activities, outside assignments using an online homework management system, and/or class participation.

Grading Scale
Letter Grade Percentage:

- 93-100%=A
- 90% - 92.9%=A-
- 87% - 89.9%=B+
- 83% - 86.9%=B
- 80% - 82.9%=B-
- 77% - 79.9%=C+
- 73% - 76.9%=C
- 70% - 72.9%=C-
- 67% - 69.9%=D+
- 63% - 66.9%=D
- 60% - 62.9%=D-
- <60% =E

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for BAC 231

BAC235 - Tax Accounting

Overview

Subject
Accounting

Academic Department
Business & Economics

School
Business, Entrepreneurshp, PD

Course Description
Examines the basic application and rationale of the federal income tax law and provides training through specific problem assignments. Emphasizes tax preparation for individuals.

Course Pre-requisite(s)
BAC131 Intro to Financial Accountingwith a C grade or better

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Basic Federal Income Tax Formula
2. Inclusions and Exclusions of Gross Income
3. Adjusted Gross Income
4. Deductions
5. Self-Employment Income and Taxation
6. Sale of Capital Assets and Business Property
7. Rental Property and Royalties
8. Tax Credits
9. Withholdings and Payroll Taxes
10. Retirement Plans and Deferred Annuities
11. At-Risk and Passive Activity Tax Rules
12. Other Tax Issues

Basic Federal Income Tax Formula: Determine the amount of tax liability or refund for varying income levels, filing statuses, itemized or standard deductions, and other variables that affect tax liability.

Basic Federal Income Tax Formula: Enter Federal Income tax information into a Form 1040

Inclusions and Exclusions of Gross Income: Define gross income under the Internal Revenue Code.

Inclusions and Exclusions of Gross Income: Enter information into a Form 1040.

Adjusted Gross Income: Determine gross income and adjusted gross income.

Adjusted Gross Income: Enter information into a Form 1040.

Deductions: Compare itemized deductions to the standard deduction.

Deductions: Complete a Schedule A, and enter information into a Form 1040

Self-Employment Income and Taxation: Determine taxable income for a sole proprietorship.

Self-Employment Income and Taxation: Complete a Schedule C, and enter information into a Form 1040.

Sale of Capital Assets and Business Property: Determine tax liability resulting from gains and losses of the sale of business assets.

Sale of Capital Assets and Business Property: : Complete a Form 4797, and enter information into a Form 1040. c. Determine the tax liability resulting from gains and losses of the sale of capital assets.

Sale of Capital Assets and Business Property: Complete a Schedule D, and enter information into a Form 1040.

Rental Property and Royalties: Determine taxable income or loss from rental property and royalties.

Rental Property and Royalties: Complete a Schedule E, and enter information into a Form 1040.

Tax Credits: Distinguish between tax credits and tax deductions.

Tax Credits: Determine eligibility for tax credits.

Tax Credits: Calculate tax credits.

Tax Credits: Enter information into a Form 1040.

Withholdings and Payroll Taxes: Calculate Income, Social Security, and Medicare tax withholdings.

Withholdings and Payroll Taxes: Calculate an employer's unemployment, Social Security, and Medicare tax liability.

Retirement Plans and Deferred Annuities: Calculate tax deferability of employer-provided and individual retirement plans.

Retirement Plans and Deferred Annuities: Calculate the tax ramifications of withdrawals from employer-provided and individual retirement plans.

At-Risk and Passive Activity Tax Rules: Describe how at-risk and passive activity rules affect the amount of deductible losses from income properties.

At-Risk and Passive Activity Tax Rules: Calculate the allowable deduction from income properties.

Other Tax Issues: Determine the tax liability or deferred gains and losses from like-kind exchanges, involuntary conversions, installment sales, personal resident sales, related party sales, and wash sales.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Students will be assessed through tests, quizzes, assignments, and/or class participation.

Grading Scale
Letter Grade Percentage:

- 93-100%=A
- 90% - 92.9%=A-
- 87% - 89.9%=B+
- 83% - 86.9%=B
- 80% - 82.9%=B-
- 77% - 79.9%=C+
- 73% - 76.9%=C
- 70% - 72.9%=C-
- 67% - 69.9%=D+
- 63% - 66.9%=D
- 60% - 62.9%=D-
- <60% =E

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for BAC 235

BAC262 - Cost Accounting

Overview

Subject
Accounting

Academic Department
Business & Economics

School
Business, Entrepreneurshp, PD

Course Description
Explores the process by which companies control and plan the costs of doing business.

Course Pre-requisite(s)
BAC132 Intro to Managerial Accounting with a C grade or better

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Costs Terms and Purposes
2. Cost-Volume-Profit (CVP) Analysis
3. Job Costing
4. Process Costing
5. Activity-Based Costing and Activity-Based Management
6. Master Budgets and Responsibility Accounting
7. Flexible Budgets, Direct-Cost Variances, and Management Control
8. Costing and Segment Reporting
9. Capital Budgeting
10. Performance Measurement
11. Differential Analysis

Define a cost object.

Distinguish between direct costs and indirect costs.

Explain variable costs and fixed costs.

Distinguish inventoriable costs from period costs.

Discuss the features of cost-volume-profit analysis.

Compute the breakeven point and output level needed to achieve a target operating income.

Explain how managers use CVP analysis in decision making.

Use CVP analysis to plan variable and fixed costs.

Describe the building-block concepts of costing systems.

Compare and contrast job costing and process costing.

Track the flow of costs in a job-costing system.

Journalize the under- or over-allocated manufacturing overhead costs at the end of the fiscal year using alternative methods.

Identify the situations in which process costing systems are appropriate.

Discuss the concepts of process costing.

Compute average unit costs.

Explain broad averaging of cost allocation.

Distinguish between simple and activity-based costing systems.

Allocate costs to products or services using activity-based costing.

Evaluate the costs and benefits of implementing activity-based costing systems.

Explain how activity-based costing systems are used in activity-based management.

Describe the master budget, and explain its benefits.

Prepare the operating budget and its supporting schedules.

Explain static budgets and static budget variances.

Develop a flexible budget.

Calculate flexible budget variances and sales volume variances.

Explain standard costs.

Compute price variances and efficiency variances for direct cost categories.

Discuss how managers use variances.

Describe benchmarking, and explain its role in cost management.

Explain the difference between variable and absorption costing.

Compute product costs under variable and absorption costing methods.

Prepare segmented income statements that differentiate between traceable costs and company-wide costs.

Distinguish relevant from irrelevant information in decision-making situations.

Explain the opportunity cost concept and why it is used in decision making.

Compute return on investment (ROI), and explain how factors affect ROI. Compute residual income, through-put time, delivery cycle time, and manufacturing cycle efficiency.

Identify relevant and irrelevant costs. Prepare various analyses (drop or keep business segment, make or buy, accept or reject special order, sell at split-off or process further). Determine the most profitable use of a constrained resource.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Students will be assessed through tests, quizzes, assignments, and/or class participation.
Grading Scale
Letter Grade Percentage:

- 93-100%=A
- 90% - 92.9%=A-
- 87% - 89.9%=B+
- 83% - 86.9%=B
- 80% - 82.9%=B-
- 77% - 79.9%=C+
- 73% - 76.9%=C
- 70% - 72.9%=C-
- 67% - 69.9%=D+
- 63% - 66.9%=D
- 60% - 62.9%=D-
- <60% =E

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for BAC 262

BBA110 - Business Grammar and Punctuation

Overview

Subject
Business Administration

Academic Department
Business & Economics

School
Business, Entrepreneurshp, PD

Course Description
Emphasizes punctuation that is commonly applied to documents constructed or edited in the business environment. Covers business grammar and parts of speech in proper context.

Course Pre-requisite(s)
Eligible to take ENG courses at HFC

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
A student seeking Credit for Prior Learning will be evaluated through testing.

Goals, Topics, and Objectives

Core Course Topics

1. Parts of Speech
2. Punctuation Rules
3. Sentence Errors
4. Bullets and Numbered Lists
5. Number Usage
6. Coordinate Adjective and Compound Adjectives Agreement
7. The following and as follows
8. Respectively ~ Former ~ Latter
9. Dates ~ Addresses ~ Times
10. Common mistakes that ruin writing

Define the parts of speech.

Define subjects and verbs.

Define clauses: dependent clause vs. independent clause.

Apply the rules for commas, semicolons, colons, hyphens, dashes, quotation marks, and apostrophes in business documents.

Identify construction errors such as fragments or run-ons.

Apply the decision-making process to correct errors in sentence context.

Compare the use of paragraphs, bullets, and numbered lists to add clarity, allow scanning, draw attention.

Apply the rules for writing numbers and ordinals in business documents.

Apply the rules for punctuating coordinate adjectives and compound adjectives. Contrast the diferrence of using one vs. the other.

Organize thoughts by using the following or as follows to add clarity in writing.

Use Respectively ~ Former ~ Latter correctly in business writing.

Apply the rules necessary to write correspondence correctly that include dates, addresses, and time.

Identify the correct use of the following words: 1. there ~ their ~ they're 2. its ~ it's 3. your ~ you're 4. whose ~ who's 5. to ~ too

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Students will be assessed through tests, quizzes, homework, and/or class participation.

Grading Scale

LETTER GRADE	PERCENTAGE
A	93-100%
A-	90-92.9%
B+	87% - 89.9%
B	83% - 86.9%
B-	80% - 82.9%
C+	77% - 79.9%
C	73% - 76.9%
C-	70% - 72.9%
D+	67% - 69.9%
D	63% - 66.9%
D-	60% - 62.9%
E	<60%

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for BBA 110

BBA131 - Introduction to Business

Overview

Subject
Business Administration

Academic Department
Business & Economics

School
Business, Entrepreneurshp, PD

Course Description
Presents an integrated examination of the American business system and the operations of business organizations. Covers theories of management and their application, production, operations, marketing, and financial management of firms.

Course Pre-requisite(s)
Eligible to take ENG courses at HFC

Credit Hours
4

Total Contact Hours

Total Instructor Contact Hours:
62

Total Student Contact Hours:
62

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. History, Development, and the Role of Business in Society and the American Economic System
2. Theories of Management and Their Application
3. Production Management and Operations Management
4. Marketing Management
5. Financial Management

Analyze the history and development of the American business system.

Analyze the role of business in the American economic system.

Analyze the global context of business.

Analyze the relationship between business and government.

Identify the four functions of management.

Describe the levels of management and their relationship to the functions of management.

Analyze the Planning function.

Analyze the Controlling function.

Compare and contrast the forms of business ownership.

Examine internal organizational structures.

Analyze the process of staffing an organization.

Compare and contrast styles of leadership.

Compare and contrast theories of motivation.

Compare and contrast Production Management and Operations Management.

Analyze the steps in production control.

Analyze inventory control.

Compare and contrast the components of the Marketing Mix.

Analyze market segmentation.

Analyze the product life cycle.

Analyze the steps in product development.

Analyze pricing strategies.

Compare and contrast the components of the Promotional Mix.

Define advertising.

Compare and contrast advertising media.

Analyze publicity.

Analyze personal selling.

Analyze sales promotion.

Compare and contrast the channels of distribution.

Compare and contrast the role of wholesalers and retailers.

Compare and contrast the methods of physical distribution.

Analyze logistics management.

Analyze supply chain management.

Compare and contrast the Accounting and Finance functions.

Explain the purpose of a balance sheet.

Identify the components of a balance sheet.

Explain the purpose of an income statement.

Identify the components of an income statement.

Analyze the concept of cash flow.

Compare and contrast the sources of short-term financing.

Compare and contrast the sources of long-term financing.

Analyze the role of financial markets.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Students will be assessed through tests, quizzes, assignments, and/or class participation.

Grading Scale

LETTER GRADE	PERCENTAGE
A	93-100%
A-	90% - 92.9%
B+	87% - 89.9%
B	83% - 86.9%
B-	80% - 82.9%
C+	77% - 79.9%
C	73% - 76.9%
C-	70% - 72.9%
D+	67% - 69.9%
D	63% - 66.9%
D-	60% - 62.9%
E	<60% E

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for BBA 131

BBA133 - Business Behavior and Communication

Overview

Subject
Business Administration

Academic Department
Business & Economics

School
Business, Entrepreneurshp, PD

Course Description
Introduces the basics of appropriate behavior and communication in a business environment. Discusses personal, interpersonal, and group behaviors as well as etiquette, culture and diversity issues, interview skills, and effective problem solving techniques. Also examines how to use various communication styles in interactions with superiors, peers, subordinates, and clients.

Course Pre-requisite(s)
Eligible to take ENG courses at HFC

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
25

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Intrapersonal Behaviors
2. Interpersonal Behaviors
3. Personal On-the-Job Behaviors
4. Group Behavior and Team Building
5. Job Search and Interview Skills

Develop personal goal statements.

Exhibit good workplace attire and grooming.

Identify positive work habits, and explain how they affect relationships with others in the workplace.

Practice self-management (time and stress management).

Discuss good personal financial habits.

Demonstrate good listening skills.

Discuss culture and diversity in the workplace.

Evaluate etiquette.

Examine self-image and positive appearance.

Demonstrate good verbal communication skills used in the workplace.

Demonstrate good non-verbal communication skills used in the workplace.

Discuss organizational structures.

Construct and deliver a presentation in a group.

Identify good group and/or team behaviors used on the job.

Demonstrate effective personal, interpersonal, and group behaviors used in the workplace.

Discuss interview techniques.

Discuss proper resume content and formatting.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Students will be assessed through tests, quizzes, homework, observations of student behavior, and class participation.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for BBA 133

BBA153 - Customer Service

Overview

Subject
Business Administration

Academic Department
Business & Economics

School
Business, Entrepreneurshp, PD

Course Description
Examines the principal functions of a customer service representative, the skills needed to succeed in the workplace, and the knowledge to advance into a leadership role within the service industry. Emphasizes effective communication skills, positive attitudes, problem solving, strategies for coping with challenging and dissatisfied customers, retention of customers, methods of measuring customer satisfaction, technology and customer service, and motivational techniques. NOTE: Upon successful completion of this course, students may choose to take an exam for a National Professional Certification in Customer Service from the National Retail Federation (NRF) Foundation. This exam is not included in this course.

Course Pre-requisite(s)
Eligible to take ENG courses at HFC

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Fundamentals
2. Challenges
3. Problem Solving
4. Communication
5. Difficult Customers
6. Empowerment
7. Motivation
8. Leadership
9. Retention
10. Trends and Technology

Define customer service and customer satisfaction.

Compare internal and external customers.

Interpret the cost of losing a customer.

Identify the challenges to provide excellent customer service.

Explain reputation management.

Describe values and ethics.

Analyze different problem solving strategies.

Identify conflict.

Employ negotiation techniques.

Analyze the barriers of problem solving.

Demonstrate different communication techniques.

Discuss and demonstrate the proper use of grammar, spelling, and punctuation in customer service communications.

Discuss techniques to respond to various difficult customers.

Define empowerment.

Describe methodologies to exceed customer expectations.

Define motivation.

Describe the difference between wants and needs.

Define leadership.

Compare formal and informal leaders.

Analyze the characteristics of a leader.

Define retention.

Describe customer-retention programs.

Recognize the impact of social media on customer service.

Identify trends in customer service.

Examine technology in customer service.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Students will be assessed through tests, quizzes, in-class activities, and/or outside assignments.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for BBA 153

BBA159 - Contact Center/Help Desk Practicum

Overview

Subject
Business Administration

Academic Department
Business & Economics

School
Business, Entrepreneurshp, PD

Course Description
Presents the components, job roles, and performance factors of today's customer contact center. Discusses techniques to handle incoming customer inquires regarding products, services, accounts, and equipment; how to respond to customer inquiries, requests, and complaints; and how to troubleshoot for the customer, with prompt and courteous service, and professionalism.

Course Pre-requisite(s)
BBA153 Customer Service, CIS100 Intro Info Tech

Course Co-requisite(s)
BBA153 Customer Service, CIS100 Intro Info Tech

Credit Hours
2

Total Contact Hours
Total Instructor Contact Hours:
32

Total Student Contact Hours:
32

Course Fee
20

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Types of Contact Centers
2. Functions of Contact Centers and Job Roles
3. Performance Factors
4. Active Listening
5. Telephone Skills
6. Principles for Effective Writing
7. Handling Difficult-Customer Situations
8. Meeting Customers' Needs

Compare and contrast the various types of contact centers.

Differentiate the various functions of a contact center.

Identify and describe the job roles of contact center employees.

Interpret performance factors needed to successfully manage customer communication.

Describe and demonstrate active listening.

Apply proper and effective telephone techniques.

Compose concise, effective responses to customer correspondences.

Identify various ways to manage and resolve difficult-customer situations.

Identify effective methods to meet customers' needs.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Students will be assessed through tests, quizzes, homework, and/or class participation.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for BBA 159

BBA231 - Business Communications

Overview

Subject
Business Administration

Academic Department
Business & Economics

School
Business, Entrepreneurshp, PD

Course Description
Examines writing, speaking, and listening skills used in a business environment with a major focus on how to properly construct and edit business documents. Presents principles and styles of effective written communication. Presents planning, organizing, and outlining. Students compose business e-mails, memos, letters, resumes, and cover messages.

Course Pre-requisite(s)
BBA110 Business Grammar & Punctuation with a C grade or better and eligibility for ENG131 Introduction College Writing

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
20

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Communication in Today's Workplace
2. The 3 x 3 Writing Process
3. Positive, Negative, and Persuasive Messages
4. Employment Communications
5. Professionalism at Work

Describe the impact of communication skills (writing, speaking, and listening) in the workplace.

Explain how culture affects communication.

Explain the communication process.

Identify steps to reduce and prevent miscommunication in a multi-cultural setting.

Explain the impact of digital methods in the workplace.

Explain the 3 x 3 writing process (pre-writing, drafting, and revising).

Employ adaptive writing techniques that focus on the audience.

Compose positive messages using the "Good News" strategy.

Compose negative messages using the "Bad News" strategy

Compose persuasive messages using the "AIDA" approach -- attention, interest and desire, and the request for an action.

Identify steps in a job search.

Write an effective resume and an effective cover message.

Describe actions to take before, during, and after an interview.

Differentiate between acceptable and unacceptable behavior in the workplace.

Discuss business etiquette and ethics.

Identify the characteristics of an effective team.

Discuss skill sets needed to work as a team member.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Students will be assessed through tests, quizzes, homework, writing, and/or class participation.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for BBA 231

BBA252 - Principles of Marketing

Overview

Subject
Business Administration

Academic Department
Business & Economics

School
Business, Entrepreneurshp, PD

Course Description
Focuses on marketing functions and institutions, the policies of marketing agencies, and current marketing channels. Also covers the retailing and wholesaling of consumer goods and raw materials, pricing policies and practices, anti-competitive practices, and recent governmental activities affecting marketing.

Course Pre-requisite(s)
BBA131 Intro to Business with a C grade or better AND ENG131 Introduction College Writing eligible

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Introduction to Marketing
2. Market Strategies and the Marketing Plan
3. Marketing Ethics
4. Market Research
5. Consumer Behavior
6. Business-to-Business Marketing
7. Global Marketing
8. Segmentation, Targeting, and Positioning
9. New Product Development
10. Branding and Packaging Decisions
11. Marketing Services
12. Pricing
13. Promotional Strategies and Integrated Marketing Communications
14. Advertising, Public Relations, and Sales Promotions
15. Personal Selling and Direct Marketing
16. Wholesale, Retail, and Internet Marketing
17. Supply Chain and Channel Management

Examine how marketing satisfies customers needs and wants.

Evaluate the four P's (product, price, place, and promotion) and the roles they play in the marketing mix.

Define market strategy.

Describe the elements in a marketing plan.

Evaluate a marketing situation using SWOT (strengths, weaknesses, opportunities, and threats) analysis techniques.

Review portfolio analysis techniques.

Analyze the role of ethics and social responsibility in marketing.

Evaluate methods for gathering, analyzing, and using data

Differentiate between primary and secondary data.

Compare and contrast internal and external secondary data sources.

Assess generational cohorts

Propose ethical standards for conducting market research.

Examine the role of consumer behavior in marketing.

Formulate the consumer buying decision process and the factors affecting it

Discuss the effect the Internet has on consumer behavior.

Define business-to-business (B2B) marketing.

Compare and contrast B2B and business-to-consumer (B2C) marketing.

Describe global marketing.

Explain the purpose of the World Trade Organization (WTO) and economic communities.

Examine the factors affecting global marketing decisions.

Compare and contrast domestic and global marketing strategies.

Describe the steps in the segmenting, targeting, and positioning processes.

Differentiate the methods for segmenting a market.

Discuss and assess targeting strategies.

Explain how marketers design and implement a positioning strategy.

Analyze the effect demographics have on segmentation.

Explain how social trends affect the marketing environment.

Analyze and formulate the stages of new product development.

Assess the relationship between innovation and new product development.

Analyze the product life cycle.

Discuss branding strategies and product identity.

Explain the components of brand equity.

Distinguish between brand and line extension

Evaluate product packaging and labeling strategies.

Compare and contrast the marketing of services with the marketing of products.

Analyze the five critical components (5 C's) of pricing strategy.

Describe price elasticity.

Identify the four types of competition.

Compare and contrast pricing strategies.

Evaluate the psychological, legal, and ethical aspects of pricing.

Explain the communication model.

Evaluate the elements of the promotion mix.

Compare and contrast traditional word-of-mouth, buzz, social, viral, guerrilla, experiential, and consumer-generated media marketing.

Describe integrated marketing communication.

Define advertising.

Assess advertising objectives.

Describe the process of developing and evaluating an advertising campaign.

Evaluate different media types.

Assess the role of public relations and the development of a public relations campaign

Examine sales promotion strategies.

Evaluate the role and types of personal selling in the promotion mix.

Appraise the effects of technology on personal selling.

Analyze the legal and ethical issues in personal selling.

Explain the elements of direct marketing.

Classify the types of retailers.

Compare and contrast wholesale and retail marketing.

Analyze the effect of e-commerce on traditional retailers.

Appraise the benefits of Internet marketing.

Discuss supply chain management.

Evaluate the distribution channel function.

Analyze the flow of merchandise through the distribution channel system.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Students will be assessed through tests, quizzes, assignments, case studies, presentations, and/or class participation.
Grading Scale

LETTER GRADE	PERCENTAGE
A	93-100%
A-	90% - 92.9%
B+	87% - 89.9%
B	83% - 86.9%
B-	80% - 82.9%
C+	77% - 79.9%
C	73% - 76.9%
C-	70% - 72.9%
D+	67% - 69.9%
D	63% - 66.9%
D-	60% - 62.9%
E	<60% E

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for BBA 252

BCA100 - Computer Basics

Overview

Subject
Business Administration

Academic Department
Business & Economics

School
Business, Entrepreneurshp, PD

Course Description
Familiarizes students with the fundamentals of operating a computer and using software. Provides interactive, hands-on experience to help students become comfortable using computers. Topics include use of a mouse, familiarizing students with the keyboard, proper keyboarding technique, familiarizing students with features of Windows, introduction to files and folders, email basics, and use internet browsers and search engines.

Credit Hours

3

Total Contact Hours

Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. The Computer
2. Operating Systems
3. Application Software
4. Computer Usage
5. Keyboarding Skills
6. The Internet
7. Files
8. E-Mail
9. Basic Security Principles

Explain the basics of using a computer.

Describe the types of computers.

Differentiate between hardware and software.

Describe the parts of the computer and peripherals.

Explain the purpose of an operating system.

Describe the function of an operating system

Differentiate among the types of operating systems.

Explain the purpose of application software.

Categorize the types of application software.

Describe the functions of the different types of application software.

Interact with the computer using the mouse and the keyboard.

Use and navigate the Microsoft Windows operating system.

Open software applications.

Connect to and use a printer.

Correctly shut down computer applications, computer peripherals, and the computer.

Use proper typing techniques.

Type 25 words per minute for three minutes with four or fewer errors.

Prepare one-page business documents.

Connect to and browse the Internet.

Access websites.

Locate reliable information on the Internet.

Use search engines.

Identify appropriate search terms.

Create, save, open, close edit, delete, download, and upload files

Perform file management tasks including finding, organizing, zipping, and printing files

Perform email operations including composing, sending, opening, organizing, and attaching files.

Identify common threats to computer security and privacy including viruses, phishing, and identity theft.

Explain methods of prevention including modifying account settings.

Explain issues and recommendations related to computer ethics and netiquette including social media

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Students will be assessed through tests, quizzes, assignments, and/or class participation.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for BCA 100

BCA143 - Word Processing

Overview

Subject
Business Administration

Academic Department
Business & Economics

School
Business, Entrepreneurshp, PD

Course Description
Presents the essential features of Microsoft Word and word processing in creating and editing documents. Examines how to enhance and customize documents by applying formatting; creating headers and footers; working with columns; inserting page and section breaks; applying styles and themes; inserting hyperlinks; adding graphical elements; and creating footnotes, endnotes, citations, and bibliographies. Examines how to create tables and charts, merge documents, work with shared documents, and prepare and protect documents.

Course Pre-requisite(s)
CIS100 Intro Info Tech with a C grade or better AND Eligible to take ENG courses at HFC

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
30

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
Other

Goals, Topics, and Objectives

Core Course Topics

1. Preparing a Word Document
2. Formatting Characters and Paragraphs
3. Customizing Paragraphs
4. Formatting Pages
5. Applying Formatting and Inserting Objects
6. Maintaining Documents and Printing Envelopes and Labels
7. Creating Tables and SmartArt
8. Merging Documents
9. Customizing Paragraphs and Pages
10. Proofing Documents and Creating Charts
11. Automating and Customizing Formatting
12. Customizing Themes, Creating Macros, and Navigating in a Document
13. Inserting Special Features and References
14. Creating Specialized Tables and Indexes
15. Working with Shared Documents
16. Protecting and Inspecting Documents

Protecting and Inspecting Documents

Check spelling and grammar in documents.

Apply font formatting.

Apply styles from a Style set

Apply and modify a theme.

Change paragraph alignment.

Indent text in paragraphs.

Change spacing before and after paragraphs

Format text using the Repeat Last Command and Format Painter options.

Change line spacing.

Reveal and compare formatting.

Create numbered and bulleted lists

Apply borders and shading to paragraphs.

Sort text in paragraphs.

Set and modify tabs.

Cut, copy, and paste text.

Change document views.

Change page setup (margins, orientation, and paper size).

Insert and remove a page break, blank page, and cover page.

Insert and remove page numbers.

Insert headers and footers.

Format the page background (watermark, background color, and page border).

Find and replace text and formatting.

Insert a section break.

Format text into columns.

Hyphenate words automatically and manually.

Create a drop cap.

Insert symbols, special characters, date, and time.

Use the Click and Type feature.

Align text vertically.

Insert and format images, text boxes, shapes, WordArt, and screenshots.

Use the Print Screen feature.

Create, rename, and delete folders.

Copy, move, and rename documents.

Save documents in different formats.

Open, re-size, and split windows to view documents side by side.

Create labels and envelopes.

Create a document using a template.

Create a table

Change table design.

Change table layout, and customize table cells.

Convert text to a table and a table to text.

Perform calculations in a table.

Insert an Excel spreadsheet.

Create and format SmartArt

Create a data source file and main document.

Create merged documents, envelopes, and labels.

Edit a data source.

Input text during a merge.

Customize bullets and numbers.

Customize objects and images.

Insert and customize headers and footers.

Keep text together.

Customize spelling checking.

Display word count.

Use the Thesaurus and Smart Lookup.

Translate text to and from different languages.

Create and format a chart.

Customize Autocorrect

Insert, sort, edit, save, and delete building blocks

Insert, format, and update fields.

Customize the Quick Access toolbar and the Ribbon.

Create, edit, save, and delete custom themes.

Format with styles.

Create, run, and delete a macro.

Use the Navigation Pane.

Insert and edit a hyperlink.

Create a cross-reference.

Sort text in paragraphs, in columns, and in a table.

Insert footnotes and endnotes.

Cite, edit, and manage sources.

Create, customize, update, and remove a table of contents.

Create, customize, update, and remove a table of figures.

Create, customize, update, and remove an index.

Insert, edit, show, reply to, print, and delete comments.

Track, display, and accept or reject changes in a document.

Compare documents.

Embed and link objects.

Use the Paste Special feature.

Protect documents by restricting formatting and editing.

Manage document properties.

Encrypt a document, and add a digital signature.

Inspect documents for accessibility and compatibility.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Students will assessed through tests, quizzes, homework, and/or class participation.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for BCA 143

BCA145 - Spreadsheets

Overview

Subject
Business Administration

Academic Department
Business & Economics

School
Business, Entrepreneurshp, PD

Course Description
Covers the essential features of Microsoft Excel and spreadsheets to prepare and format worksheets. Examines how to insert formulas and functions, create charts and diagrams, insert graphical elements, create and modify tables, perform advanced formatting and functions, track changes, protect and share worksheets, import and export data, and interpret and integrate data.

Course Pre-requisite(s)
CIS100 Intro Info Tech or CIS221 Instruction Tech for Educators with a C grade or better AND Eligible to take ENG courses at HFC

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
30

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other Exam, Other

Credit for Prior College Level Learning (CPCLL) Details
Minimum Score on Other Exam

Certification in Excel

Other Exam Details

Microsoft Office Specialist in Excel

Goals, Topics, and Objectives

Core Course Topics

1. Worksheet Preparation
2. Formulas
3. Formatting
4. Enhancements
5. Data Manipulation
6. Workbook Maintenance
7. Charts
8. Worksheet Customization
9. Advanced Formatting
10. Advanced Functions
11. Tables and Data
12. Data Summarization
13. Data Analysis
14. Worksheet Protection and Sharing
15. Macros and Customization
16. Data Distribution

Create, open, save, and edit worksheets.

Use the auto sum feature.

Use cut/copy/paste d. Select cells. e. Apply basic formatting.

Use the help feature

Develop formulas with mathematical operators.

Insert formulas using functions.

Use relative, absolute, and mixed cell references.

Use the fill handle to copy formulas.

Change column width and row height.

Merge and split cells.

Insert and delete cells, rows, and columns.

Apply a theme.

Format numbers.

Use the format painter.

- Hide and unhide columns and/or rows.
- Insert headers and footers.
- Customize a print job.
- Use spell check.
- Use find and replace.
- Sort and filter data.
- Create new worksheet in a workbook
- Manage worksheets.
- Manage windows.
- Move data.
- Create, rename, copy, and delete a folder.
- Copy a worksheet to another workbook.
- Define, apply, copy, and remove a style.
- Insert and use a hyperlink.
- Create, edit, and print a chart.
- Change the formatting and layout.
- Analyze what type of chart best fits the data
- Insert symbols.
- Insert, format, size, and move an image.
- Draw and format a text box.
- Insert SmartArt.
- Create and modify WordArt.
- Create, edit, and delete conditional formatting.
- Use special number formatting.
- Create a custom number format.
- Use special date formatting. Compute math on two dates.
- Name ranges.
- Use statistical, math, lookup, financial, and logical functions.
- Create and modify tables.
- Sort and filter tables.
- Use data tools.
- Group and ungroup data.
- Summarize data in multiple worksheets.
- Use the consolidate feature.
- Create formulas using references to other worksheets in the workbook
- Use sparklines.
- Use the paste special feature.
- Apply, edit, delete, and compile a scenario.*
- Perform what-if analyses.
- Use auditing tools.
- Manage comments.
- Share a workbook.
- Protect and unprotect worksheets.
- Protect and unprotect the structure of a worksheet.
- Track changes.
- Save, run, edit, and manage macros.*
- Print workbooks to the recent list.
- Create, save, and use custom templates.
- Import and export data.
- Prepare a workbook for distribution.
- Publish a workbook in PDF, XPS, or HTML format.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Students will be assessed through tests, quizzes, homework, and/or class participation.

Grading Scale

LETTER GRADE	PERCENTAGE
A	93-100%
A-	90-92.9%
B+	87% - 89.9%
B	83% - 86.9%
B-	80% - 82.9%
C+	77% - 79.9%
C	73% - 76.9%
C-	70% - 72.9%
D+	67% - 69.9%
D	63% - 66.9%
D-	60% - 62.9%
E	<60%

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for BCA 145

BCO190 - Co-op in Business

Overview

Subject
Business Administration

Academic Department
Business & Economics

School
Business, Entrepreneurshp, PD

Course Description
Cooperative education is a structured method of combining classroom-based education with practical work experience. A cooperative education experience, commonly known as a "co-op," provides academic credit for structured employment experience. Work experience must be directly related to the student's declared major to be eligible.To register for this course, a student must have completed 50% of core coursework, maintain an overall GPA of 2.0 and a program specific GPA of 2.5.

Course Pre-requisite(s)
Permission from Career Services Officer or Job Developer in the Office of Career Services

Credit Hours
1

Total Contact Hours

Total Instructor Contact Hours:
3

Total Student Contact Hours:
75

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
Student will submit a formal request in writing to the faculty and Associate Dean for work experience to be considered for Credit for Prior College-Level Learning.

The student will complete an interview, a reflective paper, or a presentation to the faculty in which the student develops and describes the learning objectives supported by the work experience, how those learning objectives were achieved and how that learning was put into practice.

Finally, the student must also provide a portfolio (or something comparable) that shows the work completed and provide some form of documentation confirming the work experience (a resume does not suffice) for which Credit for Prior College-Level Learning is requested.

Goals, Topics, and Objectives

Course Goals
Cooperative education helps students make the school-to-work transition, develop career and program-related learning objectives, and work on applicable skills for employment. Placements should provide students with the opportunity to apply and expand upon knowledge learned in the classroom, and develop the skills acquired in their coursework to align with the standards and expectations set by the worksite.

Core Course Topics

1. Core Career-Focused Topics

A. Professional Dress and Demeanor (attitude, posture, courteousness)
B. Workplace Communication
C. Interviewing Skills
D. Resume Building
E. Networking and Social Media
F. Seeking Employment
G. Career Advancement

Build a resume that meets standards of Career Services Officer.

Articulate the reasons for professional attire.

Wear professional attire while on the worksite

Attend career workshop in professional dress.

Display appropriate professional attitude and demeanor while on the worksite.

Interview effectively

Attend mock interview, give appropriate answers to five 5 questions.

Complete a written job application in a prompt, professional manner with all information legible, error-free, and thorough.

Display understanding of the appropriate use of Social Media sites (Facebook, LinkedIn, and Twitter) during Career Services workshop

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment will be determined by the instructor based on what is in the best interest of the student's academic growth, including future employability of the student. Assessment may include, but isn't limited to:

• Major final project
Weekly journal
Creation and attainment of all learning objectives
Participation in a career-focused workshop
Consistent and prompt attendance at worksite
Employer evaluation

General Course Requirements and Recommendations
To be determined by the instructor. A detailed course syllabi for each section of BCO190 Co-op in Business offered will be presented to the School of Business, Entrepreneurship, and Professional Development and Curriculum Committee "For Information Only" by the mid-semester point of the term the course is offered.

Texts
None

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for BCO 190

BCO191 - Co-op in Business

Overview

Subject
Business Administration

Academic Department
Business & Economics

School
Business, Entrepreneurshp, PD

Course Description
Catalog Course Description Cooperative education is a structured method of combining classroom-based education with practical work experience. A cooperative education experience, commonly known as a "co-op," provides academic credit for structured employment experience. Work experience must be directly related to the student's declared major to be eligible.To register for this course, a student must have completed 50% of core coursework, maintain an overall GPA of 2.0 and a program specific GPA of 2.5.

Course Pre-requisite(s)
Permission from Career Services Officer or Job Developer in the Office of Career Services

Credit Hours
1

Total Contact Hours

Total Instructor Contact Hours:
3

Total Student Contact Hours:
75

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
Student will submit a formal request in writing to the faculty and Associate Dean for work experience to be considered for Credit for Prior College-Level Learning.

The student will complete an interview, a reflective paper, or a presentation to the faculty in which the student develops and describes the learning objectives supported by the work experience, how those learning objectives were achieved and how that learning was put into practice.

Finally, the student must also provide a portfolio (or something comparable) that shows the work completed and provide some form of documentation confirming the work experience (a resume does not suffice) for which Credit for Prior College-Level Learning is requested.

Goals, Topics, and Objectives

Course Goals
Cooperative education helps students make the school-to-work transition, develop career and program-related learning objectives, and work on applicable skills for employment. Placements should provide students with the opportunity to apply and expand upon knowledge learned in the classroom, and develop the skills acquired in their coursework to align with the standards and expectations set by the worksite. This course is typically taken by students seeking a second one credit hour co-op in Business.

Core Course Topics

1. Professional Dress and Demeanor (attitude, posture, courteousness)
2. Workplace Communication
3. Interviewing Skills
4. Resume Building
5. Networking and Social Media
6. Seeking Employment
7. Career Advancement

Build a resume that meets standards of Career Services Officer.

Articulate the reasons for professional attire.

Wear professional attire while on the worksite.

Attend career workshop in professional dress.

Display appropriate professional attitude and demeanor while on the worksite.

Interview effectively.

Attend mock interview, give appropriate answers to five 5 questions.

Complete a written job application in a prompt, professional manner with all information legible, error-free, and thorough.

Display understanding of the appropriate use of Social Media sites (Facebook, LinkedIn, and Twitter) during Career Services workshop.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
XI. Assessment will be determined by the instructor based on what is in the best interest of the student's academic growth, including future employability of the student. Assessment may include, but isn't limited to:
Major final project
Weekly journal
Creation and attainment of all learning objectives
Participation in a career-focused workshop
Consistent and prompt attendance at worksite
Employer evaluation

General Course Requirements and Recommendations
To be determined by the instructor. A detailed course syllabi for each section of BCO 191 offered will be presented to the School of BEPD and Curriculum Committee "For Information Only" by the mid-semester point of the term the course is offered.

Texts
See School for list of required texts

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for BCO 191

BCO290 - Co-op in Business

Overview

Subject
Business Administration

Academic Department
Business & Economics

School
Business, Entrepreneurshp, PD

Course Description
Cooperative education is a structured method of combining classroom-based education with practical work experience. A cooperative education experience, commonly known as a "co-op," provides academic credit for structured employment experience. Work experience must be directly related to the student's declared major to be eligible.To register for this course, a student must have completed 50% of core coursework, maintain an overall GPA of 2.0 and a program specific GPA of 2.5.

Course Pre-requisite(s)
Permission from Career Services Officer or Job Developer in the Office of Career Services

Credit Hours
2

Total Contact Hours
Total Instructor Contact Hours:
3

Total Student Contact Hours:
150

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
Student will submit a formal request in writing to the faculty and Associate Dean for work experience to be considered for Credit for Prior College-Level Learning.

The student will complete an interview, a reflective paper, or a presentation to the faculty in which the student develops and describes the learning objectives supported by the work experience, how those learning objectives were achieved and how that learning was put into practice.

Finally, the student must also provide a portfolio (or something comparable) that shows the work completed and provide some form of documentation confirming the work experience (a resume does not suffice) for which Credit for Prior College-Level Learning is requested.

Goals, Topics, and Objectives

Course Goals
Cooperative education helps students make the school-to-work transition, develop career and program-related learning objectives, and work on applicable skills for employment. Placements should provide students with the opportunity to apply and expand upon knowledge learned in the classroom, and develop the skills acquired in their coursework to align with the standards and expectations set by the worksite.

Core Course Topics
1. Core Career-Focused Topics:

   A. Professional Dress and Demeanor (attitude, posture, courteousness)
   B. Workplace Communication
   C. Interviewing Skills
   D. Resume Building
   E. Networking and Social Media
   F. Seeking Employment
   G. Career Advancement

Build a resume that meets standards of Career Services Officer.

Articulate the reasons for professional attire.

Wear professional attire while on the worksite.

Attend career workshop in professional dress

Display appropriate professional attitude and demeanor while on the worksite.

Interview effectively.

Attend mock interview, give appropriate answers to five 5 questions.

Complete a written job application in a prompt, professional manner with all information legible, error-free, and thorough.

Display understanding of the appropriate use of Social Media sites (Facebook, LinkedIn, and Twitter) during Career Services workshop.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment will be determined by the instructor based on what is in the best interest of the student's academic growth, including future employability of the student. Assessment may include, but isn't limited to:
Major final project
Weekly journal
Creation and attainment of all learning objectives
Participation in a career-focused workshop
Consistent and prompt attendance at worksite
Employer evaluation

General Course Requirements and Recommendations
To be determined by the instructor. A detailed course syllabi for each section of BCO 290 offered will be presented to the School of BEPD and Curriculum Committee "For Information Only" by the mid-semester point of the term the course is offered.

Texts
None

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for BCO 290

BEC133 - Basic Economics

Overview

Subject
Economics & Finance

Academic Department
Business & Economics

School
Business, Entrepreneurshp, PD

Course Description
Offers an overview of macroeconomics and microeconomics. Discusses markets, supply and demand equilibrium, firm decision making, aggregate output, monetary and fiscal policy, and the principles of international trade.

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics
1. Introduction to Economics
2. Production Possibilities and Opportunity Cost
3. Supply, Demand, and Market Equilibrium
4. Profit Maximization
5. Market Structure
6. Aggregate Output
7. Unemployment and Inflation
8. The Federal Reserve System and Monetary Policy
9. Fiscal Policy
10. Trade and Comparative Advantage

Define economics.

Differentiate between microeconomics and macroeconomics.

Explain the central economic problem using the concepts of scarcity, opportunity cost, and tradeoffs.

Use a production possibilities frontier to illustrate the concepts of scarcity, opportunity cost, and tradeoffs.

Define the laws of supply and demand.

Illustrate supply curves and demand curves.

Employ supply curves and demand curves to explain the establishment of an equilibrium market price.

Solve firm profit-maximization problems using graphic or numeric cost and revenue analysis.

Define different market structures.

Analyze the effects of market structure on price and quantity of output.

Define Gross Domestic Product (GDP).

Select the component(s) of GDP impacted by a given market transaction.

Interpret the stages of the business cycle as they relate to GDP.

Define unemployment and inflation.

Explain the calculation of the unemployment rate and the calculation of the rate of inflation.

Interpret the stages of the business cycle as they relate to unemployment and inflation.

Explain the role of the Federal Reserve System.

List the macroeconomic goals of the Federal Reserve System.

Define monetary policy.

Identify the Federal Reserve's monetary policy tools.

Explain how the tools of monetary policy can impact an economic system.

Define fiscal policy.

Identify the federal government's fiscal policy tools.

Explain how the tools of fiscal policy can impact an economic system.

Differentiate between absolute advantage and comparative advantage.

Evaluate arguments in favor of and against unrestricted international trade.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Students will be assessed through tests, quizzes, assignments, and/or class participation.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for BEC 133

BEC151 - Principles of Macroeconomics

Overview

Subject
Economics & Finance

Academic Department
Business & Economics

School
Business, Entrepreneurshp, PD

Course Description
Examines the theoretical operation of the economy as a whole. Covers the elements of a free market system, the measurement of macroeconomic performance, the creation and control of money, alternative models of government intervention to impact business cycles, economic growth, and international trade.

Course Pre-requisite(s)
ENG131 Introduction College Writing eligible

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Academic Level
Undergraduate

General Education Category
Social Sciences

Michigan Transfer Agreement (MTA) Category
Category 4: Social Sciences - Applied Degrees, Category 4: Social Sciences - Transfer Degrees

Goals, Topics, and Objectives

Core Course Topics

1. Introduction to Economics
2. Introduction to Macroeconomics
3. Gross Domestic Product
4. Economic Growth and Productivity
5. The Business Cycle
6. Unemployment
7. Inflation
8. Short-Run Economic Fluctuations
9. Alternate Macroeconomic Models
10. Banking and the Creation of Money
11. The Federal Reserve System
12. Monetary Policy
13. Fiscal Policy
14. International Trade

Define economics.

Identify the elements of the economic way of thinking.

Define the laws of supply and demand.

Illustrate supply curves and demand curves.

Differentiate between macroeconomics and microeconomics.

Explain the central economic problem.

Define free market capitalism and central planning.

Evaluate the outcomes of free market capitalism and central planning.

Define Gross Domestic Product (GDP) as a measure of macroeconomic activity.

Explain the equality of output, income, and spending.

List the spending components of GDP.

Select the component(s) of GDP impacted by a given market transaction.

List the determinants of economic growth including the factors of production and compatible institutions.

Explain the connection between savings and investment.

List the stages of the business cycle.

Interpret the stages of the business cycle as they relate to economic variables such as GDP, unemployment, and inflation.

Define unemployment and the unemployment rate.

Describe the causes and effects of unemployment.

Interpret the unemployment rate and other labor market statistics.

Define inflation and deflation.

Describe the causes and effects of inflation.

Interpret the rate of inflation.

Use aggregate demand and aggregate supply to model the macroeconomy.

Create and employ graphs in an explanation of short-run economic fluctuations.

Compare and contrast the assumptions of different schools of macroeconomic thought.

Compare and contrast the conclusions of different schools of macroeconomic thought.

Define money and the money supply.

Define fractional reserve banking.

Interpret the money multiplier.

Demonstrate the creation of money through lending.

Describe the role of the Federal Reserve System (FRS).

Analyze the process by which the FRS controls the money supply and interest rates.

List the tools of monetary policy.

Describe the impact that the tools of monetary policy can have on an economic system.

Appraise the strengths and weaknesses of monetary policy.

Evaluate monetary policy recommendations using macroeconomic tools and models.

List the tools of fiscal policy.

Describe the impact that the tools of fiscal policy can have on an economic system.

Appraise the strengths and weaknesses of fiscal policy.

Evaluate fiscal policy recommendations using macroeconomic tools and models.

Apply the concept of comparative advantage to international trade.

Evaluate arguments in favor of and against free trade.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Students will be assessed through tests, quizzes, assignments, and/or class participation.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for BEC 151

BEC152 - Principles of Microeconomics

Overview

Subject
Economics & Finance

Academic Department
Business & Economics

School
Business, Entrepreneurshp, PD

Course Description
Examines how decision makers address the central economic problem of scarcity through markets and other mechanisms. Covers price theory, the elements of a market system, consumer behavior, production theory, market structures, labor markets, market imperfections, and government intervention.

Course Pre-requisite(s)
ENG131 Introduction College Writing eligible

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Academic Level
Undergraduate

General Education Category
Social Sciences

Michigan Transfer Agreement (MTA) Category
Category 4: Social Sciences - Applied Degrees, Category 4: Social Sciences - Transfer Degrees

Goals, Topics, and Objectives

Core Course Topics

1. Introduction to Economics
2. Marginal Analysis and Decision Making S
3. upply and Demand Model
4. Equilibrium Price and Market Changes
5. Elasticity
6. Consumer Surplus and Producer Surplus
7. Market System and Price Signals
8. Government Involvement in Markets
9. Consumer Behavior Theory
10. Production and Cost Theory
11. Market Structures and Firm Behavior
12. Market Failures
13. Labor Markets and Wages
14. Public Choice Theory

Define economics.

Differentiate between microeconomics and macroeconomics.

Explain the basic economic questions.

Define opportunity cost, and identify the opportunity cost of a decision.

Explain the principles of diminishing marginal benefit and increasing marginal cost.

Summarize the economic way of thinking and the marginal approach to decision making.

Solve problems using the marginal approach.

Define the laws of supply and demand.

Identify the determinants of supply and demand.

Illustrate and interpret supply curves and demand curves.

Draw a supply and demand diagram, and identify market equilibrium.

Explain how market price tends to move towards equilibrium.

Use the supply and demand model to predict the impact of changes in supply and demand on equilibrium price and quantity.

Analyze a given price change, and offer an explanation for the price change.

Define and calculate elasticity.

Interpret a price elasticity coefficient.

Identify the determinants of price elasticity of demand and supply.

Estimate price elasticity of demand or supply for a product based on product and market characteristics.

Combine elasticity with the supply and demand model to analyze magnitudes of price changes.

Define consumer surplus and producer surplus.

Identify on a diagram the amount of consumer surplus and producer surplus.

Interpret the amount of consumer surplus, producer surplus, and total surplus generated by market activity.

State the conditions for the efficiency in terms of total surplus.

Identify the ways markets are linked.

Explain how market price acts as a signal that can efficiently coordinate resource allocation across all markets.

Compare and contrast the market systems method of allocation with alternative methods of allocation.

Explain how government interventions such as price controls, taxes, subsidies, and criminalization can affect market efficiency and the allocation of resources.

Use the supply and demand model to predict the impact of a given government intervention on price, quantity, and total surplus.

Explain dead weight loss, and identify it on a graph.

Define tax incidence, and explain how elasticity impacts the tax incidence.

Define utility.

Explain the law of diminishing marginal utility.

State the utility maximization rule.

Identify the factors that influence consumer behavior based on the utility maximization rule.

Differentiate between the short run and long run.

Differentiate between fixed and variable costs.

Identify the gains to division of labor and specialization.

Explain the law of diminishing returns.

Explain the relationship between quantity produced and marginal cost.

Define economies of scale, and identify the factors that generate economies of scale.

List types of market structures, give their characteristics, and give approximate examples of each

Explain why perfectly competitive markets minimize the cost of production and maximize the total value of production.

Explain why firms in a perfectly competitive market can only make a normal profit in the long run.

Identify barriers to entry and other sources of market power.

Compare and contrast market structures based on their degree of market power, efficiency, and allocation of resources.

Analyze firm behavior linking firm behavior to market structure.

Evaluate polices designed to promote or restrict competition.

Define market failure.

List sources of market failure.

Define externality, and identify examples of externalities.

Define public goods, and identify examples of public goods.

Define common resources, and explain the tragedy of the commons.

Assess government options for correcting market failures.

Identify the determinants of labor supply and demand.

Illustrate and interpret labor supply curves and demand curves.

Use the labor supply and demand model to predict the impact of changes in supply and demand on equilibrium wage and quantity.

Analyze a given labor market outcome, and offer an explanation for the wage change.

Explain the assumptions and the prediction of public choice theory

Analyze a political outcome, and use the economic way of thinking to explain that outcome.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Students will be assessed through tests, quizzes, assignments, and/or class participation.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for BEC 152

BEC252 - Economics for Entrepreneurs

Overview

Subject
Economics & Finance

Academic Department
Business & Economics

School
Business, Entrepreneurshp, PD

Course Description
This course invites students to take a deeper look at some of the principles of microeconomics while introducing new material often found in an intermediate microeconomics course or a managerial economics course. Central to the course is the application of economic theory to business decisions that an entrepreneur or manager will face. Topics include optimization, elasticity of demand, estimation of demand and of costs, production theory, concentration and competition, pricing strategies, game theory, and behavioral economics. The impact of macroeconomic conditions on businesses is also covered.

Course Pre-requisite(s)
A grade of C or better in either BEC151 Prin Macro Economics or BEC152 Prin Micro Economics AND eligibility for MATH115 College Algebra.

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Introduction to Managerial Economics
2. Demand and Supply with Algebra
3. Demand Elasticities with Algebra
4. Estimating Demand
5. Production Theory
6. Estimating Supply
7. Market Structure
8. Pricing Strategies
9. Game Theory
10. Uncertainty, Risk, and Information Asymmetry
11. Behavioral Economics and Choice Architecture
12. Macroeconomic Conditions

Explain optimization using a framework of marginal analysis.

Define and calculate profits.

Describe profit maximization.

Define utility and describe utility maximization.

Use algebra to solve for a market equilibrium.

Use algebra to calculate producer surplus and consumer surplus.

Calculate and interpret own-price elasticity of demand.

Calculate and interpret cross-price elasticity of demand.

Calculate and interpret income elasticity of demand.

Evaluate the economic incidence of a tax.

Use elasticities to evaluate a business decision.

List market research techniques for estimating demand and demand elasticities.

Choose the appropriate market research technique for a given situation.

Differentiate various statistical estimation techniques.

Define and calculate total product, average product, marginal product, marginal revenue product, the marginal rate of technical substitution, and the user cost of capital.

Explain diminishing marginal returns.

Identify the relevant range of production.

Decide the optimal level of a single resource.

Decide the optimal levels of multiple inputs.

Define and calculate the elements of total costs, average costs, and marginal costs.

Explain increasing, constant, and decreasing returns to scale.

Identify the minimum efficient scale.

List techniques for estimating costs.

Define market power, and explain how to identify it.

Describe the degree of concentration or competition in a market.

Interpret the various determinants of market structure.

Explain the impact of market power on firm decision making.

Explain the impact of potential competition.

Explain markup pricing.

Model price discrimination and identify its impact on profits and total gains from trade.

Describe various strategies for simultaneous pricing of multiple products.

Define game theory and strategic decision making.

Describe techniques for analyzing games, including Nash equilibrium.

Use a payoff matrix to analyze a game.

Analyze a sequential game.

Use game theory to evaluate a business decision.

Explain how to incorporate uncertainty and risk into economic models.

Identify sources of business risk and describe ways of incorporating risk into business decision making.

Define asymmetric information.

Describe strategies for overcoming information problems.

Describe the cognitive biases identified by behavioral economics.

Apply lessons from behavioral economics to business decisions.

Summarize various measures of macroeconomic conditions.

Evaluate the impact of macroeconomic conditions on demand.

Evaluate the impact of macroeconomic conditions on supply.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Scenario-based problems requiring students to apply economic theory to business decisions will comprise at least 50% of the total grade.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for BEC 252

BFN130 - Beginning Investment

Overview

Subject
Economics & Finance

Academic Department
Business & Economics

School
Business, Entrepreneurshp, PD

Course Description
Introduces the principles of investing by examining the security selection process. Covers an examination of cash equivalent, debt (bond), and equity (stock) asset classes as well as other investment options. Discusses how to select securities and mutual funds to build investment portfolios; the mechanics involved with setting up accounts; the buying and selling of securities; tax consequences; and the psychology of investing.

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Academic Level
Undergraduate

General Education Category
Wellness

Goals, Topics, and Objectives

Core Course Topics

1. Introduction to Investing
2. Financial Markets and Indexes
3. Risk and Return
4. Cash, Cash Equivalents, and Deposit Accounts
5. Equity (Stock) Investments
6. Bonds (Debt) Investments
7. Comparing Stocks and Bonds
8. Buying and Selling Stocks and Bonds
9. Evaluating Stocks and Bonds
10. Investing Strategies
11. Mutual Funds
12. Portfolio Construction and Retirement
13. Real Estate
14. Precious Metals, Commodities, Futures, Collectibles, and Crypto Currencies
15. The Federal Reserve and the Yield Curve
16. Options

Define Basic Investing Concepts.

List the Categories of Investments.

Explain Financial Intermediaries.

Explain the difference between Primary and Secondary Markets.

Define Equity (Stock) Markets.

Explain Stock Market Indexes.

Define Debt (Bond) Markets.

Discuss other Investing Markets.

Discuss Government regulation of Financial Markets.

Define Risk.

Discuss the different types of Financial Risk.

Explain Diversification.

Define and discuss Return.

Explain Compounding.

Discuss Cash and Cash Equivalents.

Discuss Time Deposits, Money Market Accounts, and Money Market Funds.

Define basic stock concepts.

Explain how a return is earned through stock ownership.

Compare and contrast Preferred and Common Stock.

Explain secured versus unsecured debt.

Explain the rating of corporate debt.

Explain the Term of Debt.

Discuss the different types of corporate bonds.

Explain how corporate bonds work and earning a return on bonds.

Discuss Government Bonds and Municipal Bonds.

Compare and contrast the risks and returns of stocks versus bonds.

Explain the impact of interest rates on stocks versus bonds.

Explain the impact of inflation or deflation on stocks versus bonds.

Discuss Convertible Securities.

Explain the different types of Brokerage Firms.

Compare Cash versus Margin Accounts.

Discuss the different types of orders when buying or selling securities.

Explain Short Selling.

Explain Stock Splits.

Discuss Fundamental Analysis.

Discuss Technical Analysis.

Explain the basics of Modern Portfolio Theory.

Explain the Efficient Market Hypothesis and Passive Investing.

Explain Active Investing.

Explain Focus Investing.

Discuss the Psychology of Investing.

Explain Dollar Cost Averaging.

Discuss the different types of Mutual Funds.

Explain how to buy and sell Mutual Funds.

Discuss the costs of investing in Mutual Funds.

Explain Asset Allocation.

Explain the use of Mutual Funds in Portfolio Construction.

Discuss the principles of Investing for Retirement.

Discuss the different types of retirement accounts.

Discuss Social Security.

Discuss the different types of real estate investing.

Discuss the Pros and Cons of investing in real estate.

Explain Depreciation.

Discuss Investing in Precious Metals.

Discuss Investing in Commodity Markets.

Discuss Futures Markets.

Discuss Investing in Collectibles.

Discuss Investing in Crypto Currencies.

Explain the role of Federal Reserve.

Explain Federal Reserve control of Interest Rates.

Discuss the Yield Curve.

Define Options.

Explain Call Options.

Explain Put Options.

Discuss basic Option Strategies.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Students will be assessed through tests, quizzes, homework, assignments, and/or class participation.

Satisfies Wellness Requirement
Yes

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for BFN 130

BFN141 - Personal Finance

Overview

Subject
Economics & Finance

Academic Department
Business & Economics

School
Business, Entrepreneurshp, PD

Course Description
Examines common financial concerns such as budgeting, obtaining and managing credit, buying insurance, planning for taxes, purchasing a car and/or home, and saving for retirement. Discusses stocks, bonds, and mutual funds. Also provides information on career planning and employee benefits.

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Introduction to Personal Finance and Financial Planning
2. Time Value of Money
3. Current Financial Situation Assessment
4. Personal Goals
5. Financial Information and Financial Professionals
6. Financial Services Commonly Available to Households
7. Consumer Credit and Household Debt
8. Household Spending and Savings
9. Purchase of a Car and a House
10. Risk Management and Insurance Options
11. Savings and Investment
12. Career Planning
13. Consumer Protection

Discuss the need for financial literacy.

Identify the household activities related to personal finance.

Identify life events that have a significant impact on personal finances.

Identify the steps in the financial planning process.

Calculate the future value of a single deposit or an annuity.

Calculate the present value of a future sum of money.

Determine the opportunity cost of a financial decision by calculating the time value of money.

Discuss record-keeping methods.

Create a balance sheet, and compute net worth.

Create cash flow statements.

Create a household budget.

Discuss the three time frames for financial goals: short term, intermediate term, and long term.

Explain the characteristics of effective financial goals.

Decide upon a set of personal financial goals.

Decide upon a set of personal non-financial goals.

Identify sources of financial information.

Identify types of financial professionals.

Explain how financial professionals and financial information providers may have a conflict of interest.

Discuss how to interview prospective financial professionals.

- Assess financial information sources and financial professionals.
- Compare and contrast financial institutions based on financial services, ownership structure, fees, and consumer protection.
- Discuss reasons to avoid high-cost financial service providers such as check-cashing outlets, payday lenders, and pawnshops.
- Compare and contrast savings instruments.
- Compare and contrast payment methods.
- Discuss how to manage a checking account.
- Develop a plan to meet household financial service needs while minimizing institutional fees.
- Discuss the advantages and disadvantages of using consumer credit.
- Distinguish between the proper and improper uses of consumer credit.
- Assess the sources of consumer credit.
- Discuss the process for getting a loan or applying for a credit card.
- Discuss common mistakes people make with credit cards.
- Demonstrate how to check one's credit report.
- Develop a plan to improve a credit report.
- Analyze the causes of overspending.
- Propose strategies for reducing monthly expenses.
- Identify strategies for increasing savings.
- Discuss the steps in the research-based buying process and the common mistakes made in each step.
- Compare options of leasing or buying a car.
- Calculate a vehicle price that is affordable based on income, debt obligations, interest rates, and other information.
- Compare options of renting or buying housing.
- Calculate a home price that is affordable based on income, debt obligations, mortgage rates, and other information.
- Discuss how major purchases impact the ability to meet other financial goals.
- Identify the risk management strategies available to households.
- Discuss personal events that carry risk and strategies for reducing the financial impact of those events.
- Identify insurance options available to households.
- Explain the tradeoff between risk acceptance and insurance cost.
- Design a total insurance plan to meet one's needs.
- Identify the link between saving and investing.
- Explain the tradeoff between risk and reward.
- Explain the importance of diversification, and give examples of ways to diversify.
- Distinguish between equity investments and debt investments.
- Compare investment options based on the level of risk and the expected return.
- Explain how to buy a stock and a bond.
- Build an investment portfolio based on a set of financial goals.
- Explain the relationship between career selection and the ability to meet financial and non-financial goals.
- Research careers with respect to earning potential and job stability.
- Evaluate industries and employers based on employee benefits offered.
- Discuss the importance of continuous education and training.
- Identify the major laws that provide consumer protection.
- Explain the process of making a complaint to consumer protection agencies.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Students will be assessed through tests, quizzes, assignments, and/or class participation.

Satisfies Wellness Requirement
Yes

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for BFN 141

BFN253 - Principles of Finance

Overview

Subject
Economics & Finance

Academic Department
Business & Economics

School
Business, Entrepreneurshp, PD

Course Description
Introduces the fundamentals of financial management, financial statements, time value of money, interest rates, and stocks and bonds. Also examines capital budgeting models, cash flow analysis, working capital management, financial ratio analysis, and firm performance.

Course Pre-requisite(s)
BAC131 Intro to Financial Accounting with a C grade or better AND BBA131 Intro to Business with a C grade or better

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Introduction to Financial Management
2. Financial Statements
3. Time Value of Money
4. Interest Rates
5. Stocks and Bonds
6. Capital Budgeting Models
7. Cash Flow Analysis
8. Working Capital Management
9. Financial Ratio Analysis
10. Capital Funding
11. Dividends, Dividend Policy, and Stock Splits

Define financial management, and explain the main areas in finance.

Identify the relationship of the financial manager to other corporate functions.

Explain the various legal forms of business.

Analyze financial statements.

Calculate cash flow.

Explain the time value of money.

Calculate the future value and present value of a lump-sum payment.

Evaluate the future value and present value of annuities.

Describe annual percentage rate (APR), compounding periods, the periodic interest rate, and the effective annual rate (EAR).

Explain nominal and real interest rates, risk-free rates, and premiums.

Discuss the characteristics of stocks, the stock market, and stock valuation.

Discuss the characteristics of bonds, the bond market, and bond valuation.

Calculate the payback period, net present value, and internal rate of return.

Compare and contrast valuation techniques.

Examine cash flow and its impact on the growth of a business.

Assess the incremental cash flow for a new project.

Explain and calculate production, collection, and payment cycles.

Discuss managing accounts receivable, float, and inventories.

Analyze performance using short-term (liquidity) and long-term (leverage) solvency ratios, asset management ratios, and profitability ratios.

Calculate market value ratios.

Compare a firms ratios with industry averages.

Discuss the business life cycle and the problems and opportunities in each phase.

Compare and contrast sources of capital.

Explain the declaration date, ex-date, record date, and payment date.

Discuss low-, high-, and no-dividend payout policies.

Examine stock dividends, stock splits, and reverse splits.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Students will be assessed through tests, quizzes, assignments, and/or class participation.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for BFN 253

BIO130 - Evolution and Behavior

Overview

Subject
Biology

Academic Department
Biological Science

School
Science, Tech, Engr & Math

Course Description
Introduces principles of evolution and animal behavior (including human). Considers genetic, physiological, and evolutionary explanations of behaviors. Topics include evolution and natural selection, genetic inheritance, DNA structure and function, basic cell structure and function, innate behaviors, learning, motivation, communication, aggression, sexual behavior, territoriality, play, vestigial behaviors, selfishness, and altruism.

Course Pre-requisite(s)
ENG131 Introduction College Writing eligible

Credit Hours
4

Total Contact Hours
Total Instructor Contact Hours:
62

Total Student Contact Hours:
62

Course Fee
10

Academic Level
Undergraduate

General Education Category
Natural Sciences

Michigan Transfer Agreement (MTA) Category
Category 6: Natural Sciences - Applied Degrees, Category 6: Natural Sciences - Transfer Degrees - Lecture Only

Goals, Topics, and Objectives

Core Course Topics

1. What is Science?
2. What is life?
3. What is evolution?
   a. What is natural selection?
4. Who was Charles Darwin?
5. How do physiological or proximal and evolutionary or ultimate explanations answer "why" questions, but teleological explanations do not?
6. Why do we have diseases like Ebola virus, cancer, and cystic fibrosis?
   a. Why do bacteria develop antibiotic resistance? Why do we age?
7. What characteristics define and distinguish animals?
8. What are animal behavior, ethology, and behavioral biology?
9. What are the evolutionary and genetic bases of social behaviors?
   a. What is meant by gene selfishness, and how does the concept explain the course of evolution?
10. How do cells divide and animals reproduce?
11. What are the roles of genes, chromosomes, proteins, and environment in determining physical and behavioral traits?
12. How do chromosomes determine sex?
13. What is sexual selection?
14. What are the various mating systems?
15. What is parental care and how does if vary across the animal kingdom?
16. What are the mechanisms of evolutionary change, and how do they cause evolution to occur?
17. What is a species, and how do species form and become extinct?
18. What evidence supports evolution?
19. What is the history of human evolution?
20. How do humans compare and contrast with the great apes?
21. What is culture?
22. What are the causes of conflict between groups?

Provide a working definition of science.

List the characteristics of living organisms.

Summarize the processes of evolution, including natural selection.

Describe the life and discoveries of Charles Darwin.

Distinguish between proximate and evolutionary explanations.

Explain the proximal and evolutionary causes of diseases like Ebola virus, cancer, and cystic fibrosis.

Explain why bacteria develop antibiotic resistance.

Describe the characteristics of an animal.

Describe the genetic bases and evolutionary development of social behavior, including the concept of the selfish gene.

Define Animal Behavior, Ethology and Behavioral Biology.

Compare and contrast mitosis and meiosis.

Describe the roles that genes, chromosomes, proteins, and environment play in determining traits.

Describe how chromosomes determine sex in various animals, especially humans.

Compare the different mating systems.

Explain how various mating behaviors and strategies of parental care are related to sexual selection.

Describe the mechanisms of evolutionary change and how they cause evolution to occur.

State the biological definition of a species.

Describe causes of extinction.

Explain scientific evidence that supports evolution.

Compare and contrast humans and the great apes.

Describe the history of human evolution.

Compare and contrast human societies with societies of other animals and evaluate culture as it might relate to other animals.

Propose explanations for the causes of conflict between groups.

Demonstrate mastery of selected biological facts as listed in the unit objectives.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
The main method of assessment of student learning will be lecture exams that include objective and short essay questions. Additional assignments will also be included.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for BIO 130

BIO131 - Introduction to Biology

Overview

Subject
Biology

Academic Department
Biological Science

School
Science, Tech, Engr & Math

Course Description
A foundational course emphasizing the unifying themes of biology. Explores various aspects of living systems, including biological chemistry, cell biology, genetics, evolution, diversity, structure and function relationships, energy transformations, plant and animal systems, ecology, biodiversity, and conservation. Introduces the scientific method and scientific reasoning. Three hours of lecture and three hours of lab per week.

Course Pre-requisite(s)
ENG131 Introduction College Writing eligible

Credit Hours
4

Total Contact Hours
Total Instructor Contact Hours:
92

Total Student Contact Hours:
92

Course Fee
27

Academic Level
Undergraduate

General Education Category
Natural Sciences

Michigan Transfer Agreement (MTA) Category
Category 6: Natural Sciences - Applied Degrees, Category 6: Natural Sciences - Transfer Degrees - Lecture and Lab

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other Exam

Credit for Prior College Level Learning (CPCLL) Details
- Score of 4 or higher on AP (Advanced Placement) Biology Exam
- Score of 50 or higher on CLEP (College-Level Examination Program) Biology Exam
- Score of 5 or 6 on IB-HL (International Baccalaureate-Higher Level) Biology Exam

Goals, Topics, and Objectives

Core Course Topics
1. The nature of science and the properties of life
    1. Scientific method
    2. Scientific reasoning and experimental design
    3. Properties of living things
    4. Major themes in biology
2. Biological chemistry
    1. Atomic structure and bonds
    2. Water as a biological solvent
    3. Effects of pH on living systems
    4. Carbon-based macromolecules
    5. Enzymes
3. Biology of cells
    1. Prokaryotic and eukaryotic cell structure
    2. Plant and animal cell structure
    3. Membranes
    4. Organelle structure and function
    5. Cell cycle
    6. Mitotic cell division
4. Genetics
    1. Chromosomes
    2. Meiotic cell division
    3. Sexual reproduction
    4. Errors in meiosis
    5. Mendelian inheritance
5. DNA, RNA, and protein
    1. DNA structure
    2. DNA replication
    3. Transcription
    4. Translation
    5. Mutations
    6. The genetic basis of cancer
6. Evolution and classification
    1. How populations change
    2. Evidence for evolution
    3. Mechanisms of evolution
    4. Classification
7. Energy transformations
    1. Energy in living systems
    2. Cellular respiration and fermentation
    3. Photosynthesis
8. Diversity
    1. Prokaryotes
    2. Viruses
    3. Fungi
    4. Protists
    5. Plants
        - Structure and function
        - Major groups of plants
    6. Animals
        - Structure and function
        - Major groups of animals
9. Human body systems
    1. Organization and homeostasis
    2. Tissues
    3. Digestive system
    4. Respiratory system
    5. Cardiovascular system
    6. Immune system
    7. Endocrine system
    8. Urinary system
    9. Reproductive system
10. Ecology
    1. Community ecology
    2. Ecosystems and the biosphere
    3. Biodiversity
    4. The effects of humans on the environment
    5. Conservation

Explain and apply the scientific method; demonstrate scientific reasoning.
Identify the properties of a properly-designed scientific experiment.
Conduct scientific experiments and clearly communicate results.
Demonstrate use of critical thinking skills in the analysis of experimental data.
Demonstrate proficiency in basic biological laboratory skills, in keeping with safety guidelines.
Recall, restate, and apply basic biological facts and concepts as listed in the individual unit objectives.
Describe the properties of living organisms.
Describe the chemical basis of living organisms.
Describe cell structure and function.
Explain the role of negative feedback in homeostasis.
Describe material cycling and energy flow in ecosystems.
Describe interactions among organisms and between organisms and their environment.
Predict inheritance patterns using knowledge of the relationship between DNA, RNA and proteins.
Explain how evolutionary theory applies to the structure and function of living organisms.
Explain the role of natural selection in evolution.
Explain how evolution accounts for both the unity and diversity of life.
Describe levels of organization and related functions in plants and animals.
Explain how human activity affects the natural world.
Demonstrate professional behavior in all aspects of the course.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Lecture and lab exams, homework, and lab response sheets covering each major topic with the percentage of student achievement for these elements and the percentage of the total course being standard across sections.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for BIO 131

BIO134 - Essentials of Anatomy and Physiology

Overview

Subject
Biology

Academic Department
Biological Science

School
Science, Tech, Engr & Math

Course Description
A comprehensive study of all eleven body systems in a one-semester course. Lecture emphasizes how anatomy, chemistry, and cell biology permit the specific functioning of organs and systems. Lab reinforces understanding of the associated anatomic structures. Please note: BIO-134 is a 5 credit, content-heavy course, which requires a substantial time commitment and focused study beyond the conventional expectations in a standard 100 level science course. Four hours of lecture and two hours of lab per week.BIO-134 does not substitute for the BIO-233/BIO-234 sequence required by HFC's Nursing and Physical Therapist Assistant programs in the School of Health and Human Services (HHS). BIO-134 may serve as refresher/ remedial course for the 233/234 sequence if taken within 5 years of original courses and permission is granted from the School of HHS.

Course Pre-requisite(s)
ENG131 Introduction College Writing eligible

Credit Hours
5

Total Contact Hours
Total Instructor Contact Hours:
92

Total Student Contact Hours:
92

Course Fee
27

Academic Level
Undergraduate

General Education Category
Natural Sciences

Michigan Transfer Agreement (MTA) Category
Category 6: Natural Sciences - Applied Degrees, Category 6: Natural Sciences - Transfer Degrees - Lecture and Lab

Goals, Topics, and Objectives

Course Goals
BIO134 Essentials Anatomy&Physiology currently provides the academic foundation of Anatomy & Physiology for selected Allied Health curricula at HFC and for guest students from selected universities where a five credit, one-semester Anatomy and Physiology course is the standard.

Core Course Topics
1. Introduction to body organization and anatomical terms
2. Basic chemistry
3. Cell structure and function
4. Histology of human tissues
5. Integumentary system
6. Skeletal system and joints
7. Muscular system
8. Nervous system
9. Endocrine system
10. Cardiovascular system
11. Immune system and body defense
12. Respiratory system
13. Digestive system and metabolism
14. Urinary system, fluid/electrolyte and acid/base balance
15. Reproductive systems

Describe the position of the body in the anatomical position and state the anatomical terms identifying specific parts of the body.

Define homeostasis and describe an example related to the functioning of each system in the body.

For each class of organic molecule (carbohydrate, lipid, protein and nucleic acid), name its respective monomer building block(s), explain its value or importance for the needs of the human body, and briefly describe how its basic molecular structure differs from the other monomers.

Distinguish between each of the following cellular transport mechanisms by describing the basis for the directional movement of molecules: diffusion, osmosis, facilitated diffusion, active transport, filtration, phagocytosis, and pinocytosis.

Describe the structural and functional characteristics that distinguish each of the four fundamental tissue categories as well as their sub-categories where applicable: epithelial, connective, muscle, and nervous.

Describe the structure and function of the integument, including accessory structures and pathological conditions. Explain its role in fluid and electrolyte balance.

Name the bones of the axial and appendicular skeleton, and the bones involved in formation of each diarthrotic joint of the body.

For each designated muscle, describe its attachment points to the skeleton (origin and insertion), its action at that joint, and its relationship to other muscles as an antagonist or synergist.

Describe the relationship of a neuron to the following structures: Schwann cells, myelin sheath, synapses, and neurotransmitters.

Describe the relationship of sensory neurons and motor neurons of the peripheral nervous system to interneurons and the integrative functions of the central nervous system.

Explain the means by which the hypothalamus controls or regulates the secretory functions of both the anterior pituitary gland and the posterior pituitary gland.

Describe the difference between plasma and serum, hematocrit and hemoglobin content, erythrocyte and reticulocyte, antigen and antibody.

Describe the path of blood through both sides of the heart, naming the sequence of chambers, valves, and major blood vessels through which it flows.

Explain the respective roles of filtration and osmotic pressure in the exchange of materials between the blood and the tissue fluid surrounding cells of the body.

Describe the differences between cell-mediated Immunity and humoral immunity, describing the roles of T-cells, B-cells, memory cells, NK cells, and plasma cells.

Describe the general operation of the respiratory system; compare the transport of respiratory gases (oxygen and carbon dioxide) in the blood and explain the basis for the toxic effect of carbon monoxide.

Describe the general operation of the digestive system by relating the stages of mechanical digestion, chemical digestion, and absorption to the functioning of specific organs.

Describe what happens to a glucose molecule as it progresses through the three stages of cellular respiration, indicating where the carbon dioxide is generated, where most of the ATP is generated, and where oxygen is required.

Describe the role of the kidneys in determining the chemical composition of the blood by listing the normal components of urine and describing how the kidneys vary the amounts of the filtered wastes.

Define pH as a measurement and explain the relationship of the pH scale to acidic, neutral, and basic values. Describe the effects of pH imbalance on body function.

Describe the male and female reproductive systems and the role of the pituitary gland and hormones in reproductive cycles.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Course objectives are designed to measure/assess critical thinking and the student's understanding of the subject matter.

Assessment methods:

- Lecture exams which assess understanding of structural relationships and physiology.
- Three lab practical exams designed to measure the student's ability to identify anatomic structures, organs, and systems as they are related to the specific function.

General Course Requirements and Recommendations
While there is no formal science prerequisite to this course, it is highly recommended that a student have some experience in college-level academic success before registering for BIO134 Essentials Anatomy&Physiology. Completing a course in Medical Terminology prior to or simultaneously with BIO134 Essentials Anatomy&Physiology is advised.

Texts
Lecture: Marieb and Keller Essentials of Human Anatomy & Physiology, 12th ed., 2018, and its accompanying Student Workbook (workbook optional).
Lab: Rivers' Course Objectives and Lab Guide to BIO 134, current printing

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for BIO 134

BIO135 - Microbiology for Allied Health Sciences

Overview

Subject
Biology

Academic Department
Biological Science

School
Science, Tech, Engr & Math

Course Description
For health service personnel not needing the extensive laboratory experience and breadth of material of BIO 251. Emphasizes the biology of medically important microbes, epidemiology and disease transmission, sterile technique, basics of immunity, the microbiology of wounds, and current regulations regarding blood-borne pathogens and bio-hazardous wastes. Three hours of lecture and two hours of lab per week.

Course Pre-requisite(s)
ENG131 Introduction College Writing eligible

Credit Hours
4

Total Contact Hours
Total Instructor Contact Hours:
77

Total Student Contact Hours:
77

Course Fee
40

Academic Level
Undergraduate

General Education Category
Natural Sciences

Michigan Transfer Agreement (MTA) Category
Category 6: Natural Sciences - Applied Degrees, Category 6: Natural Sciences - Transfer Degrees - Lecture and Lab

Goals, Topics, and Objectives

Course Goals
Students will gain an appreciation of the many roles of microbes in human life and will master the material at a level to allow them to pass the microbiology section of a licensure exam for an allied health field.

The course topics and objectives are based on the Microbiology in Nursing and Allied Health (MINAH) Undergraduate Curriculum Guidelines established by the American Society for Microbiology. These recommendations and details regarding approved laboratory objectives are available from The American Society for Microbiology.

Core Course Topics

1. Theme 1: Microbial diversity
    - Categories of medically important microbes
2. Theme 2: Microbial cell biology
    - Information flow within a cell
    - Regulation of cellular activities
    - Cellular structure and function
    - Growth and division
    - Cell energy metabolism
3. Theme 3: Microbial genetics
    - Inheritance of genetic information
    - Causes and consequences of mutations
    - Exchange and acquisition of genetic information
4. Theme 4: Interactions and impact of microbes and humans
    - Microbiome in health and disease
    - Microbial pathogenicity
    - Host defense mechanisms
    - Identifying and managing infectious diseases
    - Disease transmission
    - Antimicrobial drugs and chemotherapy
    - Vaccines
    - Epidemiology and public health
    - Healthcare associated infections
5. Theme 5: Interactions and impact of microbes in the environment
    - Ubiquity of microbes
    - Adaptation and natural selection
    - Symbiosis
    - Controlling microbial growth in the environment
    - Biofilms
6. Theme 6: Integrating Themes
    - Microbial evolution
    - Scientific process and critical thinking

Describe the morphology, physiology, characteristics, and classification of diverse types of medically important microbes including prokaryotic, eukaryotic, and acellular pathogens.

Explain how genetic information is inherited, exchanged, and acquired by microbes, and how modification of genetic information occurs.

Describe how various environmental factors affect the growth of microbes.

Discuss ways in which microbes interact with other organisms and with their environment.

Discuss the complex interactions between humans and microbes and explain how these interactions impact human health.

Identify mechanisms of microbial pathogenicity.

List and describe common infectious diseases and discuss how they are diagnosed and treated.

Identify mechanisms by which human diseases can be transmitted and how transmission can be prevented.

Explain how the immune system responds to challenge by microbes, and how vaccinations are safe and effective in preventing the spread of disease.

Describe the impact of healthcare associated infections.

Explain how epidemiological principles are used to track and reduce the incidence of infectious disease.

Describe ways to control microbes in a health care setting by following Universal Precautions and infection control measures

Explain how antimicrobial substances are used to combat infectious agents.

Explain how antimicrobial resistance arises and describe activities that can limit the threat of antimicrobial resistance.

Interpret cases studies about microbiology by applying knowledge about microbes.

Apply appropriate microbiological methods to isolate, differentiate, and identify microbes

Demonstrate knowledge of the concepts of asepsis and sterility to safely work with live microbes.

Demonstrate scientific reasoning, analysis, and communication skills.

Additional Learning Outcome information

Theory Skills

A student successfully completing this course will be able to:

1. Compare the structures of the various classes of microbes, including gram-negative and gram-positive bacteria, fungi, protozoans, viruses, and prions.
2. Identify the morphology of bacteria, fungi, and viruses from a sample or picture.
3. Compare the metabolic processes of various kinds of microbes.
4. Explain how varying environmental factors (temperature, pH, osmotic pressure, etc.) can affect microbial growth and give examples of how these factors can be used to inhibit or encourage microbial growth.
5. Describe the various methods of microbial control and explain how they can be appropriately used to sterilize, disinfect, pasteurize, or otherwise reduce the microbial population in the laboratory or health care setting.
6. Explain the roles of nucleic acids and proteins in cell reproduction and metabolism.
7. Identify examples of transduction, transformation, and conjugation.
8. Define and identify various symbiotic relationships among microbes and their hosts.
9. Explain the roles of barriers, nonspecific immunity, and specific immunity in preventing infections.
10. Explain the process by which vaccination gives rise to resistance to diseases.
11. Give examples of mechanisms of disease transmission, describing the roles of fomites, carriers, vectors, and vehicles where appropriate, and explain how knowledge of these mechanisms can be used to protect patients and health care workers from infection.
12. Discuss the etiology and control of common diseases, particularly bloodborne pathogens and those that cause wound infections.
13. List commonly used antimicrobial drugs, their modes of action, and examples of their uses.
14. Explain how populations of microbes adapt to their environment.
15. Explain the genetic basis of antimicrobial drug resistance and how overuse of antimicrobial drugs can lead to the rise of drug-resistant microbes; describe activities that can limit the threat of antimicrobial resistance.

Laboratory Skills

A. Laboratory Techniques

A student successfully completing this course will be able to:

1. Use a bright field light microscope to view and interpret slides.
2. Properly prepare slides for microbiological examination.
3. Properly use aseptic techniques for the transfer and handling of microbes and instruments.
4. Use appropriate microbiological media and test systems.
5. Use standard microbiology laboratory equipment correctly.
6. Follow an experimental protocol.
7. Accurately record observations made in the laboratory using proper terminology.

B. Laboratory Thinking Skills

A student successfully completing basic microbiology will demonstrate skills in:

1. Scientific reasoning, including
    - formulating a clear, answerable question
    - developing a testable hypothesis
    - predicting expected results
2. Analysis skills, including
    - collecting and organizing data in a systematic fashion
    - presenting data in an appropriate form (graphs, tables, figures, or descriptive paragraphs)
    - assessing the validity of the data (including integrity and significance)

- drawing appropriate conclusions based on the results

3. Communication skills, including:
    - discussing and presenting results or findings in the laboratory
4. Interpersonal and citizenry skills, including
    - working effectively in teams or groups so that tasks, results, and analyses are shared
    - effectively managing time and tasks allowing concurrent and/or overlapping tasks to be done simultaneously by individuals and within a group
    - integrating knowledge and making informed judgments about microbiology in everyday life.

Laboratory Safety

A student successfully completing basic microbiology will be able to explain and practice safe microbiological procedures, including:

1. Reporting all spills and broken glassware to the instructor and receiving instructions for clean up
2. Methods for aseptic transfer
3. Minimizing or containing the production of aerosols and describing the hazards associated with aerosols
4. Washing hands prior to and following laboratories and at any time contamination is suspected
5. Using universal precautions with blood and other body fluids and following the requirements of the OSHA Bloodborne Pathogen Standard
6. Disinfecting lab benches and equipment prior to and at the conclusion of each lab session, using an appropriate disinfectant and allowing a suitable contact time
7. Identifying and disposing of different types of waste
8. Reading and signing a laboratory safety agreement indicating that the student has read and understands the safety rules of the laboratory
9. Good lab practice, including returning materials to proper locations, proper care and handling of equipment, and keeping the bench top clear of extraneous materials
10. Protective procedures, including:
    - Tying long hair back and wearing personal protective equipment as appropriate (eye protection, lab coats, gloves, closed shoes)
    - Always using appropriate pipetting devices and understanding that mouth pipetting is forbidden
    - Never eating or drinking in the laboratory
    - Never applying cosmetics, handling contact lenses, or placing objects (fingers, pencils, etc.) in the mouth or touching the face
11. Emergency procedures, including:
    - Locating and using emergency equipment (eye wash stations, first aid kits, fire extinguishers, chemical safety showers, telephones, and emergency numbers)
    - Reporting all injuries immediately to the instructor
    - Following proper steps in the event of an emergency

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Details of the assessment of student achievement are left to the discretion of the individual instructor. However, a substantial part of the assessment (not to exceed 50%) should be based on evaluation of Laboratory Skills. The assessment of Theory and Laboratory Skills should be based on a variety of measures, including, where feasible, testing, written papers, oral communication, and practical applications of knowledge or skills.
General Course Requirements and Recommendations
Students should complete at least one major laboratory project that requires experimental design, application of laboratory techniques and analysis of data (e.g., identification of an unknown organism).

Texts
Texts will be chosen from among generally recognized microbiology texts.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for BIO 135

BIO138 - Environmental Science Lecture

Overview

Subject
Environmental Studies

Academic Department
Biological Science

School
Science, Tech, Engr & Math

Course Description
Explores environmental science, an interdisciplinary study which combines ideas and information from the natural sciences (such as biology, chemistry, and geology) and the social sciences (such as economics, politics, and ethics) to present a general idea of how nature works and how everything in nature is interconnected. Emphasizes human modification of natural systems and strategies for promoting environmental health. Also discusses current environmental concerns.

Course Pre-requisite(s)
ENG131 Introduction College Writing eligible

Credit Hours

3

Total Contact Hours

Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
10

Academic Level
Undergraduate

General Education Category
Natural Sciences

Michigan Transfer Agreement (MTA) Category
Category 6: Natural Sciences - Applied Degrees, Category 6: Natural Sciences - Transfer Degrees - Lecture Only

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other Exam

Credit for Prior College Level Learning (CPCLL) Details
Score of 4 or 5 on AP Environmental Science Exam.

Goals, Topics, and Objectives

Course Goals
This course will present the fundamental concepts of environmental science. After completing this course students will be able to:

- Use scientific laws, principles, models, and concepts to understand environmental and resource problems and possible solutions.
- Understand how these concepts, problems and solutions are connected.
- Develop a list of principles, concepts, and rules to serve as guidelines in making decisions.
- Think logically and critically.

Core Course Topics

1. Sustainability
2. Ecosystems
3. Biodiversity
4. The human population
5. Climate & biodiversity
6. Sustaining biodiversity
7. Food, soil and pest management
8. Risk, toxicology & human health
9. Water pollution
10. Air pollution
11. Geology
12. Energy
13. Climate change & ozone depletion
14. Sustainable cities
15. Solid & hazardous waste
16. Economics, environment & sustainability
17. Politics, environment & sustainability
18. Environmental worldviews, ethics & sustainability

Sustainability (a): Describe the three principles that nature has used to sustain itself for at least 3.5 billion years and list how we can use these principles to live more sustainably.

Sustainability (b): Explain how we can use these three principles to get us closer to the vision of a sustainable Earth.

Sustainability (c): Evaluate how our human ecological footprint affects the Earth.

Sustainability (d): Distinguish among the planetary management, stewardship and environmental wisdom worldviews.

Ecosystems (a): Describe the steps involved in the scientific process.

Ecosystems (b): Describe what happens when matter and energy undergo changes.

Ecosystems (c): List the major components of an ecosystem.

Ecosystems (d): Describe what happens to matter and energy in an ecosystem.

Ecosystems (e): Describe the following cycles: water, carbon, nitrogen, phosphorous and sulfur.

Biodiversity (a): Explain what species diversity and biodiversity are and why they are important.

Biodiversity (b): Explain how speciation, extinction and human activities affect biodiversity.

Biodiversity (c): Distinguish among the following species interactions and give one example of each: competition, predation, and symbiosis.

Biodiversity (d): Describe what limits the growth of populations.

Biodiversity (e): Explain how living systems achieve some degree of stability or sustainability by undergoing constant change in response to changing environmental conditions.

The human population (a): List the factors that can affect the birth rate and fertility rate of a country.

The human population (b): Explain how age structure affects population growth and economic growth.

Climate & biodiversity (a): Describe how differences in climate lead to formation of tropical, temperate and polar deserts, grasslands and forests.

Climate & biodiversity (b): Describe how climate and vegetation vary with latitude and elevation.

Climate & biodiversity (c): Describe how human activities have affected the world's biomes.

Climate & biodiversity (d): Distinguish between a saltwater (marine) and a freshwater life zone and give examples of each

Climate & biodiversity (e): List the major ecological and economic services that are provided by marine and freshwater systems.

Climate & biodiversity (f): List the human activities that pose major threats to marine ecosystems and the human activities that threaten coral reefs.

Sustaining biodiversity (a): List three reasons why many extinction experts think that human activities are now causing a new mass extinction.

Sustaining biodiversity (b): Explain how the extinction of a species affects other species and ecosystem services.

Sustaining biodiversity (c): Describe the major effects of habitat loss and fragmentation.

Sustaining biodiversity (d): Explain how pesticides such as DDT can be biomagnified in food chains and food webs.

Sustaining biodiversity (e): Describe the precautionary principle and explain how we can use it to help protect wild species and overall biodiversity.

Sustaining biodiversity (f): Describe the major ecological and economic benefits that forests provide.

Sustaining biodiversity (g): List some of its major harmful environmental effects of deforestation.

Sustaining biodiversity (h): List the ways to protect tropical forests and use them more sustainably.

Sustaining biodiversity (i): List the ways to reduce overgrazing and use rangelands more sustainably.

Sustaining biodiversity (j): Explain how we should manage and sustain parks and nature reserves.

Sustaining biodiversity (k): Describe the major threats to aquatic biodiversity.

Sustaining biodiversity (l): Explain how we can protect and sustain marine and freshwater biodiversity.

Sustaining biodiversity (m): Describe how to manage and sustain marine and freshwater fisheries.

Sustaining biodiversity (n): Describe invasions of the U.S. Great Lakes by nonnative species.

Food, soil and pest management (a): Explain what food security is and why it is difficult to attain.

Food, soil and pest management (b): Define organic agriculture and compare its main components with those of conventional industrialized agriculture.

Food, soil and pest management (c): Define and distinguish among industrialized agriculture (high-input agriculture), plantation agriculture, hydroponics, traditional subsistence agriculture, traditional intensive agriculture, polyculture and slash-and-burn agriculture.

Food, soil and pest management (d): Summarize the use of energy in industrialized food production.

Food, soil and pest management (e): Describe the advantages and disadvantages of modern pesticides.

Food, soil and pest management (f): Define integrated pest management (IPM) and discuss its advantages.

Food, soil and pest management (g): Describe how we can produce food more sustainably.

Risk, toxicology & human health (a): Define risk and distinguish between risk assessment and risk management.

Risk, toxicology & human health (b): Define toxicology, toxicity, dose and response.

Risk, toxicology & human health (c): Describe the major health hazards that we face.

Risk, toxicology & human health (d): Describe the biological and chemical hazards that we face.

Risk, toxicology & human health (e): Describe how we perceive risks and how can we avoid the worst of them.

Water pollution (a): Discuss the causes and effects of water pollution.

Water pollution (b): Describe the major water pollution problems in streams and lakes.

Water pollution (c): List the major pollution problems affecting groundwater and other drinking water sources.

Water pollution (d): List the major water pollution problems affecting oceans.

Water pollution (e): Explain why preventing water pollution is the best way to deal with it.

Air pollution (a): Describe the layers of the atmosphere.

Air pollution (b): List the major outdoor and indoor air pollutants and their harmful effects.

Air pollution (c): Define acid deposition and explain why it is a problem.

Air pollution (d): Describe the health effects of air pollution.

Air pollution (e): Explain why preventing air pollution is more important than controlling it.

Geology (a): Describe the earth's major geological processes and hazards.

Geology (b): Define and explain the importance of the rock cycle.

Geology (c): Define mineral resources and describe the environmental effects of using them.

Geology (d): Describe how we can apply the three scientific principles of sustainability in order to obtain and use nonrenewable mineral resources in a more sustainable way.

Energy (a): Define net energy and explain why is it important.

Energy (b): List the advantages and disadvantages of using oil, natural gas, coal and nuclear energy.

Energy (c): Explain why improving energy efficiency is an important energy goal.

Energy (d): List the technologies we can use to cut energy waste.

Energy (e): List the advantages and disadvantages of using solar energy, hydropower, wind power, biomass, geothermal energy and hydrogen as energy resources.

Energy (f): Discuss how we can make the transition to a more sustainable energy future.

Climate change & ozone depletion (a): Explain why weather and climate are not the same and explain the differences between them.

Climate change & ozone depletion (b): Describe the greenhouse effect and why is it so important to life on earth.

Climate change & ozone depletion (c): Describe how the earth's temperature and climate might change in the future.

Climate change & ozone depletion (d): List possible effects of a warmer atmosphere.

Climate change & ozone depletion (e): List thing that we can do to slow projected climate change.

Climate change & ozone depletion (f): Explain how we have depleted ozone in the stratosphere and what can we do about it.

Climate change & ozone depletion (g): Discuss how the problems of atmospheric warming and ozone depletion are connected.

Sustainable cities (a): Describe the major population trends in urban areas.

Sustainable cities (b): List the major urban resources and environmental problems.

Sustainable cities (c): List the advantages and disadvantages of urbanization.

Sustainable cities (d): Describe the importance of urban land-use planning.

Sustainable cities (e): Discuss how cities can become more sustainable and livable.

Solid & hazardous waste (a): Define solid waste and hazardous waste and explain why they are problems.

Solid & hazardous waste (b): Describe a sustainable approach to dealing with solid and hazardous waste.

Solid & hazardous waste (c): Discuss why reusing and recycling materials is so important.

Solid & hazardous waste (d): List the advantages and disadvantages of burning or burying solid waste.

Solid & hazardous waste (e): Discuss how we can make the transition to a more sustainable low-waste society.

Economics, environment & sustainability (a): Explain how economic systems are related to the biosphere.

Economics, environment & sustainability (b): Discuss how we can place values on natural capital and control pollution and resource use.

Economics, environment & sustainability (c): Describe how we can use economic tools to deal with environmental problems.

Economics, environment & sustainability (d): Describe how reducing poverty can help us deal with environmental problems.

Economics, environment & sustainability (e): List the methods we can use to shift to more environmentally sustainable economies.

Politics, environment & sustainability (a): Describe the role of government in making the transition to a more sustainable society.

Politics, environment & sustainability (b): Describe the process by which environmental policy is made.

Politics, environment & sustainability (c): Discuss the role of environmental law in dealing with environmental problems.

Politics, environment & sustainability (d): List the major roles of environmental groups.

Politics, environment & sustainability (e): Describe how we can improve global environmental security.

Politics, environment & sustainability (f): Describe how we can implement more sustainable and just environmental policies.

Environmental worldviews, ethics & sustainability (a): List the major environmental worldviews.

Environmental worldviews, ethics & sustainability (b): Describe the role of education in living more sustainably.

Environmental worldviews, ethics & sustainability (c): List the major shifts involved in achieving more sustainable societies.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of academic achievement may include quizzes, readings, assignments, and formal paper.

Texts
Living in the Environment. current edition by G. Tyler Miller and Scott E. Spoolman

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for BIO 138

BIO139 - Environmental Science Laboratory

Overview

Subject
Environmental Studies

Academic Department
Biological Science

School
Science, Tech, Engr & Math

Course Description
Investigation of current environmental concerns. Particular focus will be given to the Rouge River watershed. Field trips to local sites during the lab period will be included. This course meets once a week for three hours of lab work.

Course Pre-requisite(s)
ENG131 Introduction College Writing eligible

Credit Hours
2

Total Contact Hours
Total Instructor Contact Hours:
45

Total Student Contact Hours:
45

Course Fee
24

Academic Level
Undergraduate

General Education Category
Natural Sciences

Michigan Transfer Agreement (MTA) Category
Category 6: Natural Sciences - Applied Degrees, Category 6: Natural Sciences - Transfer Degrees - Lab Only

Goals, Topics, and Objectives

Course Goals
This course will present the fundamental concepts of environmental science. After completing this course students will be able to:

- Use scientific laws, principles, models, and concepts to understand environmental and resource problems and possible solutions.
- Understand how these concepts, problems and solutions are connected.
- Develop a list of principles, concepts, and rules to serve as guidelines in making decisions.
- Think logically and critically.

Core Course Topics
1. Importance of Biodiversity
2. Groundwater modeling
3. Dichotomous keys
4. Soil quality measurements
5. Topographic maps
6. Geographic Information System (GIS)
7. Forestry measurements
8. Rouge River watershed, biodiversity, and macroinvertebrates
9. Energy conservation
10. Service learning
11. Population estimation
12. Natural selection
13. Greenhouse gases estimation
14. Tragedy of the commons

Collect and analyze experimental data.

Demonstrate use of critical thinking skills in the analysis of experimental data.

Write a formal lab report using a standard format.

Demonstrate familiarity with library resources and electronic media and use criteria with which to judge reliability of various resources.

Recall and restate basic scientific facts and concepts, as listed in the individual unit objectives.

Demonstrate proficiency in the use of basic laboratory equipment.

Analyze current environmental problems.

Interpret topographic maps.

Apply basic principles of Geographic Information System (GIS).

Demonstrate safe handling of equipment and supplies.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of academic achievement includes class participation, assignments, and formal papers.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for BIO 139

BIO143 - Zoology

Overview

Subject
Biology

Academic Department
Biological Science

School
Science, Tech, Engr & Math

Course Description
This course examines the diversity, evolutionary and ecological relationships, and structures and functions of the major animal groups. Animals will be studied with an emphasis on comparative anatomy and physiology, behavior, and ecology. Human impacts on biodiversity will be discussed. Lectures and labs are coordinated, with laboratory topics focused on taxonomy and anatomy using models, live specimens, behavioral experiments and dissection.

Course Pre-requisite(s)
ENG131 Introduction College Writing eligible; BIO131 Introduction to Biology or BIO134 Essentials Anatomy&Physiology or BIO135 Microbiology for AHS or BIO150 Bio: Organisms, Genes, Ecology or BIO152 Cell and Molecular Biology, with a grade of C or better OR a Biology 131 waiver. Biology 131 waiver information can be accessed through a link in the "Additional Information" section of Biology 131 course listings in the Self-Service Schedule.

Credit Hours
4

Total Contact Hours
Total Instructor Contact Hours:
92

Total Student Contact Hours:
92

Course Fee
40

Academic Level
Undergraduate

General Education Category
Natural Sciences

Michigan Transfer Agreement (MTA) Category
Category 6: Natural Sciences - Applied Degrees, Category 6: Natural Sciences - Transfer Degrees - Lecture and Lab

Goals, Topics, and Objectives

Core Course Topics
1. The science of zoology, and its unifying concepts of ecology and evolution.
2. Cell theory and its importance in zoology.
3. The structure and function of the animal cell.
4. Evolution: the history, evidence, and mechanisms.
5. Species and speciation
6. Ecology of animals
7. Conservation Biology
8. Taxonomy and phylogeny of the Animal Kingdom
9. Origin of life and early evolution
10. Body plans and patterns of organization in animals
11. Major animal phyla with emphasis on morphology, and evolutionary relationships
12. Various systems across the Animal Kingdom (ex. skeletal, muscular, nervous, endocrine, digestive, circulatory, and repiratory).
13. Thermoregulation and homeostasis
14. Embryology and development
15. Animal reproduction
16. Dissection techniques
17. Microscope techniques
18. Laboratory Safety
19. Scientific process

Define the science and unifying themes of zoology.

Describe the various structures and functions of the animal cell.

Explain the history and mechanisms of the theory of evolution.

Provide examples of how evolutionary processes relate to animal diversity.

Describe how ecology effects species behavior and survival.

Analyze the threats to Earths biodiversity, providing examples from the animal kingdom.

Describe, using cladograms, the evolutionary origin of a phylum within the Animal Kingdom and its possible phylogenetic relationships with all other groups of organisms.

List the early evolutionary events of life on Earth.

Compare and contrast the various body plans and patterns of organization in animals.

Characterize the major phyla, and selected classes and orders, in terms of anatomical systems, body organization, ecology, and behavior.

Compare the forms and functions of invertebrate and vertebrate systems in instructor identified organisms.

Classify instructor identified animals with respect to temperature regulation.

Describe osmoregulatory and excretory structures in instructor identified animal groups.

Compare the embryology and development of instructor identified organisms, including the major developmental events that occur in human pregnancy.

Compare animal reproduction in instructor identified asexually and sexually reproducing organisms.

Demonstrate the ability to safely perform detailed dissections on representative specimens from major animal phyla.

Demonstrate the ability to correctly use compound and stereoscopic microscopes in a laboratory setting.

Recognize the taxonomy, external anatomy, and internal anatomy of a zoological specimen in a laboratory setting.

Design, conduct, and analyze data from basic scientific investigations.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Student assessment focuses on course objectives. Assessments include but are not limited to: lecture exams, homework, lecture quizzes, lab quizzes or practical exams, lab activities and assignments, and class projects.

Texts
Text will be selected from books and lab manuals designed for introductory zoology courses. Text will be the same across sections.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for BIO 143

BIO150 - Biology: Organisms, Genes, and Ecology

Overview

Subject
Biology

Academic Department
Biological Science

School
Science, Tech, Engr & Math

Course Description
A one-term course that, with BIOLOGY 152, collectively forms the majors-level introductory biology course unit designed to meet the needs of students interested in transferring to four-year institutions and majoring in biological sciences or related fields, as well as students interested in entering programs in pharmacy, medicine, veterinary medicine, dentistry, and related areas. Course focuses on the nature of science, the diversity and the unity of life, evolution, inheritance, ecology, plant function and reproduction, animal physiology, and animal development. Through laboratory investigations, students develop cognitive and laboratory skills and gain experience with model organisms used in many areas of biological research. Three hours of lecture and three hours of lab per week.

Course Pre-requisite(s)
ENG131 Introduction College Writing eligible; BIO131 Introduction to Biology or BIO134 Essentials Anatomy&Physiology or BIO135 Microbiology for AHS or BIO152 Cell and Molecular Biology with a grade of C or better OR a Biology 131 waiver. Biology 131 waiver information can be accessed through a link in the "Additional Information" section of Biology 131 course listings in the Self-Service Schedule.

Credit Hours
4

Total Contact Hours

Total Instructor Contact Hours:
92

Total Student Contact Hours:
92

Course Fee
36

Academic Level
Undergraduate

General Education Category
Natural Sciences

Michigan Transfer Agreement (MTA) Category
Category 6: Natural Sciences - Applied Degrees, Category 6: Natural Sciences - Transfer Degrees - Lecture and Lab

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other Exam

Credit for Prior College Level Learning (CPCLL) Details
Score of 7 in the International Baccalaureate-Higher Level (IB-HL) biology exam.

Goals, Topics, and Objectives

Course Goals
After completing BIO 150, students should:

1. Be further acquainted with the amazing similarities among all forms of life on Earth.
2. Be further acquainted with the intriguing differences among forms of life on Earth.
3. Be experienced in using critical thinking and the scientific method.
4. Have a lifelong appreciation of the importance of understanding how the science of biology, "the study of life", truly does relate to all aspects of life and society.
5. Be more familiar with the work of professional biologists.
6. Be prepared to enroll in more advanced classes in the Biological Sciences.
7. Have new ideas to explore in other classes and/or in daily life.
8. Find greater appreciation of the complexity and beauty of life forms.

Core Course Topics

1. Biology: the scientific study of life
2. Ecosystem structure
3. Population ecology
4. Community ecology
5. Energy flow and material cycling
6. Conservation biology
7. Plasma membranes
8. DNA structure and function
9. Cell cycle and mitosis
10. Meiosis
11. Chromosomes, genetic inheritance, chance and probability
12. Evolution: the basis of the unity and the diversity of life
13. Developmental evolutionary biology
14. Population genetics
15. Speciation and macroevolution
16. Geologic time
17. Diversity of life: Prokaryotic organisms
18. Diversity of life: Protista
19. Diversity of life: Plantae
20. Diversity of life: Fungi
21. Diversity of life: Animalia
22. Diversity of life: animal evolution and developmental biology
23. Plant structure & function
24. Plant reproduction and development
25. Animal cells and tissues
26. Animal nutrition and digestion
27. Animal circulation and gas exchange
28. Animal homeostasis, osmoregulation, and excretion
29. Mammalian reproduction

Synthesize evidence acquired by scientists and apply to daily lives and to current social and environmental issues.

Demonstrate knowledge of model organisms used in many areas of biological research.

Demonstrate broad ability to make and record accurate observations.

Demonstrate designated levels of proficiency with laboratory skills used by biologists.

Design and carry out a research project using the scientific method, including presenting your results and conclusions in both a written and oral format.

Analyze and interpret scientific data using descriptive and inferential statistical methods.

Explain and apply concepts of population, community, and ecosystem ecology.

Define levels of biodiversity and conservation strategies being adopted to slow the rate of species loss.

Predict inheritance, using the rules of chance and probability, in living organism based on given genotypes and/or phenotypes.

Analyze how forces that result in micro- and macro- evolution account for bot the unity and diversity of life on Earth.

Use the Hard Weinberg equation to illustrate principles of population genetics.

Synthesize teleological, physiological and evolutionary explanations for various biological processes.

Classify plants and animals in their various phyla and classes using traditional taxonomy and cladistics.

Illustrate the major eras of geologic time and the organisms that characterize each one.

Explain selected life processes in detail and apply the principles of those processes to natural phenomena.

Connect form and function in various animal systems.

Demonstrate mastery of selected biological facts as listed in the unit objectives.

Display professional behavior, curtesy, and attitude.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Student assessment focuses on course objectives. Assessments include but are not limited to lecture exams, homework, lab quizzes, lab assignments, lab reports, presentations, skill demonstrations, and professional behavior. A standardized point distribution will be utilized across sections.

Texts
Text will be a book designed for use by biology majors, such as *Biology* by Campbell, Reece, and Mitchell or OER text (ex. OpenStax). The same text will be used across sections.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for BIO 150

BIO152 - Cell and Molecular Biology

Overview

Subject
Biology

Academic Department
Biological Science

School
Science, Tech, Engr & Math

Course Description
A one-term course that, with BIOLOGY 150, collectively forms the majors-level introductory biology course unit designed to meet the needs of students interested in transferring to four-year institutions and majoring in biological sciences or related fields, as well as students interested in entering programs in pharmacy, medicine, veterinary medicine, dentistry, and related areas. Course focuses on the diversity and unity of living organisms from the perspective of molecular and cell biology, including scientific inquiry, biological chemistry, cell structure and physiology, energy transformations, genes and gene expression, and biotechnology. Students develop critical thinking skills in the analysis of scientific information. Laboratory experiments enhance student understanding of course topics. Three hours of lecture and three hours of lab per week.

Course Pre-requisite(s)
ENG131 Introduction College Writing eligible; BIO131 Introduction to Biology or BIO134 Essentials Anatomy&Physiology or BIO135 Microbiology for AHS or BIO150 Bio: Organisms, Genes, Ecology with a grade of C or better OR a Biology 131 waiver; CHEM131 Principles of Chemistry or CHEM141 Prin Gen & Inorgan Chem I with a grade of C or better (CHEM141 Prin Gen & Inorgan Chem I recommended for biology majors). Biology 131 waiver information can be accessed through a link in the "Additional Information" section of Biology 131 course listings in the Self-Service Schedule.

Credit Hours
4

Total Contact Hours
Total Instructor Contact Hours:
92

Total Student Contact Hours:
92

Course Fee
36

Academic Level
Undergraduate

General Education Category
Natural Sciences

Michigan Transfer Agreement (MTA) Category
Category 6: Natural Sciences - Applied Degrees, Category 6: Natural Sciences - Transfer Degrees - Lecture and Lab

Goals, Topics, and Objectives

Core Course Topics

1. Scientific inquiry and biological themes
    1. The science of biology
    2. Scientific reasoning
    3. Scientific method
    4. Themes and concepts of biology
2. Chemistry
    1. Basic chemistry related to biological systems
    2. Importance of water
    3. Macromolecules of life
3. Cells: The building blocks of life
    1. The study of cells: microscopy and cell fractionation
    2. Cell theory
    3. Prokaryotic cells
    4. Eukaryotic cells
    5. Cell structure and organelles
    6. Membrane structure and function
4. Energy transformations in living organisms
    1. Chemistry and physics of life: thermodynamics, enzymes, and metabolism
    2. ATP: the energy currency of life
    3. Cellular respiration and fermentation
    4. Photosynthesis
5. Cell physiology
    1. Cell communication
    2. Feedback controls in cell physiology
    3. Cell division
    4. Cell cycle
    5. Cell cycle control
    6. Cancer and the cell cycle
6. DNA, RNA and Protein
    1. DNA structure and function
    2. DNA replication
    3. The genetic code
    4. Prokaryotic and eukaryotic transcription
    5. RNA processing in eukaryotes
    6. Ribosomes and protein synthesis
    7. Regulation of gene expression
    8. Cancer and gene expression
    9. Development and gene expression
7. Biotechnology

Design, plan, and carry out a valid biological experiment, record and analyze data, and present results and conclusions.

Explain and apply the scientific method. Explain the role of inductive and deductive reasoning in the scientific process.

Demonstrate proficiency in standard biological laboratory skills, in keeping with laboratory safety guidelines.

Apply the themes of biology, including evolution, to explain and interpret natural phenomena.

Explain how chemical principles underlie biological processes.

Explain how the cell is the fundamental unit of life, describing the basic structures, functions, and processes of prokaryotic and eukaryotic cells.

Describe the structure of biological membranes, and explain their role in transport, signaling, and energy transformations.

Describe mitotic cell division and the cell cycle, explaining cell cycle control mechanisms in normal and cancer cells.

Explain how genes encode the genetic information of the cell, how they are regulated, and how they contribute to the mechanism of protein synthesis.

Explain how genetic information is conserved, modified, and passed on from one organism to another.

Explain how living organisms require the transfer and transformation of energy and matter.

Explain how interactions are essential in biological systems, emphasizing cell signaling and feedback regulation.

Explain how biotechnology is the application of biological processes to solve problems relevant to everyday life.

Communicate biological concepts in written form using scientific terminology.

Evaluate, analyze, and interpret scientific information using critical thinking.

Demonstrate professional behavior in all aspects of the course.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Student assessment focuses on course objectives. Assessments include but are not limited to: lecture exams, homework, lab quizzes and exams, lab assignments, presentations and skill demonstrations, with the percentage of student achievement for these elements and the percentage of the total course being standard across sections.

Where appropriate, instructors are encouraged to use both written and oral assessments, and to use these in both formal and informal settings. Instructors will also assess students' professional behavior.

Texts
Texts will be chosen from among recognized "majors-level" texts.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for BIO 152

BIO233 - Anatomy and Physiology I

Overview

Subject
Biology

Academic Department
Biological Science

School
Science, Tech, Engr & Math

Course Description
Lectures cover the principles and underlying concepts of chemistry, cell biology, histology, the integumentary system, articulations, the skeletal system, the muscular system, and the nervous system. Lab reinforces understanding of the associated anatomic structures. BIO-233 and BIO-234 are a two-semester sequence designed for the student who plans to pursue a career in a health field. Three hours of lecture and two hours of lab per week.

Course Pre-requisite(s)
ENG131 Introduction College Writing eligible; BIO131 Introduction to Biology or BIO134 Essentials Anatomy&Physiology or BIO135 Microbiology for AHS or BIO150 Bio: Organisms, Genes, Ecology or BIO152 Cell and Molecular Biology with a grade of C or better OR a Biology 131 waiver. Biology 131 waiver information can be accessed through a link in the "Additional Information" section of Biology 131 course listings in the Self-Service Schedule.

Credit Hours
4

Total Contact Hours
Total Instructor Contact Hours:
77

Total Student Contact Hours:
77

Course Fee
24

Academic Level
Undergraduate

General Education Category
Natural Sciences

Michigan Transfer Agreement (MTA) Category
Category 6: Natural Sciences - Applied Degrees, Category 6: Natural Sciences - Transfer Degrees - Lecture and Lab

Goals, Topics, and Objectives

Core Course Topics

1. Introduction to the human body
    - Anatomy and physiology overview
    - Overall levels of organization
    - Body cavities
    - Directional terms
    - Homeostasis
    - Stress
    - Basic terminology
2. Chemical level of organization
    - Atoms
    - Molecules and bonds
    - Chemical reactions
    - Inorganic compounds
    - pH
    - Organic compounds
3. Cellular level of organization and metabolism
    - Structures and functions of a cell
    - Membrane mechanisms
    - Cytoplasm
    - pH
    - Osmosis
    - Nucleus
    - Protein synthesis
    - DNA
    - RNA
    - Mitochondrial metabolism
    - Aging
4. Histology (tissues)
    - Overall functions
    - Types
    - Epithelium
    - Connective tissues
    - Membranes
    - Muscle tissue
    - Neural tissue
    - Tissue injuries
    - Aging
5. Skin (Integumentary system)
    - Layers: epidermis, dermis and subcutaneous
    - Accessory structures
    - Functions
    - Endocrine and nervous controls
    - Aging
    - Integration with other systems
6. Skeletal tissue (osteology)
    - Structure and functions
    - Histology
    - Development and growth
    - Replacement, repair, and integration with other systems
7. Joints (articulations)
    - Classification system

- Form and function (interrelationships)
- Aging
- Diseases and disorders

8. Muscle tissue (myology)
   - Anatomy (micro and macro)
   - Types of muscle tissue
   - Contraction physiology
   - Muscle mechanics
   - Exercise
   - Aging
   - Integration with other systems
9. Nerve tissue (neurology)
   - Types
   - Structures
   - Overall functions
   - Neuroglia
   - Physiology mechanisms
   - Synapse
   - Medications
   - Disorders
   - Aging
   - Levels of neural organization
10. Brain
    - Organization
    - Regions
    - Ventricles
    - Meninges (protection and support)
    - Cerebrum
    - Limbic system
    - Mesencephalon
    - Cerebellum
    - Pons
    - Medulla
    - Higher level integration
11. Cranial nerves
    - Structure
    - Location
    - Functions
12. Somatic sensory and motor pathways
    - Overall organization
    - Functions
    - Interrelationships
    - Higher order functions
    - Brain chemistry and behavior
    - Aging
13. Autonomic nervous system and higher order functions
    - Divisions and organization (anatomy)
      - Sympathetic division
      - Parasympathetic division
      - Somatic division
    - Interactions, integration and controls
    - Aging

Describe how form influences function.
Define roots, prefixes and suffixes of the medical terminology encountered to aid the understanding of new vocabulary.
Demonstrate a knowledge of fundamental anatomical and physiological processes and facts.
Relate and apply the concept of pH and osmosis to all relevant systems and topics.
Identify the major organs of each system and describe their primary functions
Identify the negative feedback mechanisms of each major system and how they interrelate.
Summarize the process of protein synthesis and its relevance to human physiology.
Distinguish between the levels of organization in each system and how they interrelate.
Demonstrate the ability to interpret and understand graphs and charts.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Student assessment is built into the course objectives. Objectives were written using terms that allow their achievement to be measured. Students will be assessed on:

- Specified lab skills to determine if they have achieved the level of proficiency designated. See previous *Course Objectives* section.
- Occasional lab quizzes based on readings.
- Lab materials learned will be assessed on lab practicals.
- Lecture materials learned will be assessed on combinations of objective questions and other question formats.
- Professional behavior and attitude.
- Answers to questions posed by instructor in lecture and/or lab.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for BIO 233

BIO234 - Anatomy and Physiology II

Overview

Subject
Biology

Academic Department
Biological Science

School
Science, Tech, Engr & Math

Course Description
Lectures cover the principles and underlying concepts of special senses, the endocrine system, the circulatory system, the lymphatic system, immunity, the respiratory system, and the digestive system, metabolism and energetics, the urinary system, fluid, electrolyte and acid/base balance, and the reproductive systems. Lab reinforces understanding of the associated anatomic structures. BIO-233 and BIO-234 are a two-semester sequence designed for the student who plans to pursue a career in a health field. Three hours of lecture and two hours of lab per week.

Course Pre-requisite(s)
BIO233 Anatomy and Physiology I with a C grade or better.

Credit Hours
4

Total Contact Hours
Total Instructor Contact Hours:
77

Total Student Contact Hours:
77

Course Fee
24

Academic Level
Undergraduate

General Education Category
Natural Sciences

Michigan Transfer Agreement (MTA) Category
Category 6: Natural Sciences - Applied Degrees, Category 6: Natural Sciences - Transfer Degrees - Lecture and Lab

Goals, Topics, and Objectives

Core Course Topics

1. Special senses (smell, taste, vision, hearing and equilibrium):
    - receptors and receptor function
    - olfaction
    - gustation
    - vision
    - equilibrium
    - hearing
2. Endocrine system
    - principles and mechanisms
    - endocrine glands
    - hormonal interaction
    - integration with other systems
3. Hematology
    - functions of blood
    - composition
    - plasma
    - formed elements
    - hemostasis
4. Cardiology
    - heart anatomy
    - heartbeat
    - cardiodynamics
    - cardiovascular system
5. Cardiovascular system
    - physiology of cardiovascular system
    - blood vessels
    - blood pressure
6. Lymphatic system and immunity
    - organization
    - body defenses (specific and non-specific)
    - the immune response
    - development of resistance
    - stress
    - aging
    - integration with other systems
7. Respiratory system
    - structures and functions
    - upper vs. lower
    - lungs
    - pleural cavities and pleural membranes
    - physiology
    - controls
    - acid-base balance
    - birth and aging
    - integration with other systems
8. Digestive system
    - structures and functions
    - esophagus
    - stomach
    - small intestine
    - large intestine
    - digestion and absorption
    - aging
    - integration with other systems
9. Metabolism and nutrition
    - overview
    - carbohydrate
    - protein and lipid metabolism
    - diet and nutrition
    - bioenergetics
    - aging
10. Urinary system
    - structures and functions
    - physiology of urine production
    - acid-base regulation
    - urine transport
    - storage and elimination
    - aging
    - integration with other systems
11. Fluid, electrolyte and acid-base balance
    - overall concepts
    - acid-base balance mechanisms (respiratory and urinary systems)
    - electrolyte basics
    - disturbances of acid-base balance
    - aging
    - integration with other systems
12. Reproductive systems
    - overview
    - male reproductive system
    - female reproductive system
    - menstrual cycle
    - aging
    - pregnancy
    - integration with other systems

Describe the relationships between form and function.
Define roots, prefixes and suffixes of the medical terminology encountered to aid the understanding of new vocabulary.
Demonstrate a knowledge of fundamental anatomical and physiological processes and facts.
Relate and apply the concept of pH and osmosis to all relevant systems and topics.
Identify the major organs of each system and describe their primary functions.
Identify the negative feedback mechanisms of each major system and how they interrelate.
Distinguish between the levels of organization in each system and how they interrelate.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Course objectives are designed to measure/assess critical thinking and the student's understanding of the subject matter.

Assessment methods:

- Lecture exams which assess understanding of structural relationships and physiology.
- Three lab practical exams designed to measure the student's ability to identify anatomic structures, organs, and systems as they are related to the specific function.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for BIO 234

BIO251 - Microbiology

Overview

Subject
Biology

Academic Department
Biological Science

School
Science, Tech, Engr & Math

Course Description
Introduces microbes and their activities. Covers a wide range of material in lecture and laboratory exercises, including structure and function of diverse microbes, nutrition, growth, metabolism, microbial genetics, and the role of microbes in disease, immunity, and other selected applied areas. Emphasizes the biology of microbes and their interaction with humans and the environment, and in learning the techniques used to safely work with bacteria, viruses, and fungi. Recommended for students anticipating further study in biological or biomedical sciences. Three hours of lecture and five hours of lab each week.

Course Pre-requisite(s)
ENG131 Introduction College Writing eligible; BIO131 Introduction to Biology or BIO134 Essentials Anatomy&Physiology or BIO135 Microbiology for AHS or BIO150 Bio: Organisms, Genes, Ecology or BIO152 Cell and Molecular Biology with a C or better OR a Biology 131 waiver; CHEM131 Principles of Chemistry or CHEM141 Prin Gen & Inorgan Chem I with a grade of C or better (CHEM141 Prin Gen & Inorgan Chem I recommended for biology majors). Biology 131 waiver information can be accessed through a link in the "Additional Information" section of Biology 131 course listings in the Self-Service Schedule.

Credit Hours
5

Total Contact Hours
Total Instructor Contact Hours:
122

Total Student Contact Hours:
122

Course Fee
40

Academic Level
Undergraduate

General Education Category
Natural Sciences

Michigan Transfer Agreement (MTA) Category
Category 6: Natural Sciences - Applied Degrees, Category 6: Natural Sciences - Transfer Degrees - Lecture and Lab

Goals, Topics, and Objectives

Course Goals
Students successfully completing this course will gain an appreciation of the many roles of microbes at a level to prepare them for further coursework in microbiology, cell biology, and biotechnology. Students will master the material at a level to allow them to perform basic microbiological techniques independently. The course topics and objectives are based on the American Society for Microbiology's Undergraduate Microbiology Curriculum Recommendations.

These recommendations and details regarding approved laboratory objectives are available from The American Society for Microbiology or at the website http://www.asmusa.org

Core Course Topics

1. Theme 1: Microbial cell biology
    1. Information flow within a cell
    2. Regulation of cellular activities
    3. Cellular structure and function
    4. Growth and division
    5. Cell energy metabolism
2. Theme 2: Microbial genetics
    1. Inheritance of genetic information
    2. Cause, consequences and uses of mutations
    3. Exchange and acquisition of genetic information
3. Theme 3: Interactions and impact of microbes and humans
    1. Host defense mechanisms
    2. Microbial pathogenicity mechanisms
    3. Disease transmission
    4. Antibiotics and chemotherapy
    5. Genetic engineering
    6. Biotechnology
4. Theme 4: Interactions and impact of microbes in the environment
    1. Adaptation and natural selection
    2. Symbiosis
    3. Microbial recycling of resources
    4. Microbes transforming environment
5. Theme 5: Integrating Themes
    1. Microbial evolution
    2. Microbial diversity

Describe the morphology, physiology, and characteristics of diverse types of microbes, and compare these characteristics among the various groups.

Describe how various environmental factors can affect the growth rate of microbes, and analyze data from experiments that investigate this phenomenon.

Explain how genetic information is inherited, exchanged, and acquired and modified by microbes.

Explain the basic principles of gene cloning, and give examples of its application in biotechnology. Discuss some of the ways microbes interact with other organisms and with their environment.

Identify mechanisms of microbial pathogenicity and disease transmission, and give specific examples of them.

Describe and discuss the symptoms, diagnosis, and treatment of diseases caused by common microbes.

Explain how the various kinds of cells in the immune system respond to challenge by microbes, and use the example of vaccinations to illustrate prevent the spread of disease.

Use the technical vocabulary of microbiology to read and interpret technical literature about microbiology.

Demonstrate a basic proficiency in laboratory skills

Solve a practical problem in microbiology using the scientific method, and communicate the results in a standard style used by microbiologists.

Explain and practice safe microbiological procedures.

Demonstrate an increased skill level in cognitive processes, analysis skills, and communication skills.

Additional Learning Outcome information

Theory Skills

A student successfully completing basic microbiology will be able to:

1. Compare the cell structures of the various classes of microbes, including Gram negative and Gram positive bacteria, fungi, protozoans, and viruses, at the structural and biochemical levels.
2. Given a sample or picture, identify the morphology of bacteria, fungi, and viruses and describe them using appropriate terminology.
3. Compare the metabolic processes of various kinds of microbes and tell how they can be used to identify the organism.
4. Analyze data from experiments that investigate how varying environmental factors (temperature, pH, osmotic pressure, etc.) can affect microbial growth, explain how the effects are mediated, and give examples of how these can be used to inhibit or encourage microbial growth.
5. Describe the various methods of microbial control, and tell how to use them appropriately to sterilize, disinfect, pasteurize, and otherwise reduce the microbial population.
6. Explain in detail the roles of nucleic acids and proteins in cell reproduction and metabolism.
7. Explain the processes involved in transduction, transformation, and conjugation.
8. Explain the roles of barriers, nonspecific immunity, and specific immunity in preventing infections.
9. Explain the process by which vaccination gives rise to resistance to diseases.
10. Give examples of direct transmission and indirect transmission, by fomites, carriers, vehicles, and vectors of diseases, and how the principles involved can be used to protect patients and health care workers from the spread of disease and infection.
11. Discuss the etiology and control of common diseases, particularly bloodborne pathogens and those that cause wound infections.
12. Name commonly used antibiotics, explain their modes of action, and give examples of their uses.
13. Explain, using a diagram, how genes can be cloned and give examples of the use of these techniques in biotechnology.
14. Define and identify the various symbiotic relationships among microbes and their hosts.
15. Give examples of the role of microbes in shaping the ecosystems of the Earth and how microbes adapt to their environment.
16. Explain how overuse of antibiotics can lead to adaptation of microbes by genetic changes, and how this leads to the spread of antibiotic resistance.
17. Explain common biochemical, genetic, and immunological techniques used to identify pathogens.

Laboratory Skills

A. Laboratory Techniques

A student successfully completing basic microbiology will be able to:

1. Use a bright field light microscope to view and interpret slides
2. Properly prepare slides for microbiological examination
3. Properly use aseptic techniques for the transfer and handling of microbes and instruments
4. Use appropriate microbiological media and test systems
5. Estimate the number of microbes in a sample using serial dilution techniques
6. Use standard microbiology laboratory equipment correctly
7. Accurately record observations made in the laboratory using proper terminology

B. Laboratory Thinking Skills

A student successfully completing basic microbiology will demonstrate an increased skill level in:

Cognitive processes, including:

- formulating a clear, answerable question
- developing a testable hypothesis
- predicting expected results
- following an experimental protocol

Analysis skills, including:

- collecting and organizing data in a systematic fashion
- presenting data in an appropriate form (graphs, tables, figures, or descriptive paragraphs)
- assessing the validity of the data (including integrity and significance)
- drawing appropriate conclusions based on the results

Communication skills, including:

- discussing and presenting lab results or findings in the laboratory
- Interpersonal and citizenship skills, including:
- working effectively in teams or groups so that the task, results, and analysis are shared
- effectively managing time and tasks allowing concurrent and/or overlapping tasks to be done simultaneously, by individuals and within a group
- integrating knowledge and making informed judgments about microbiology in everyday life

Laboratory Safety

A student successfully completing basic microbiology will be able to explain and practice safe microbiological procedures, including:

1. Reporting all spills and broken glassware to the instructor and receiving instructions for clean up
2. Methods for aseptic transfer

3. Minimizing or containing the production of aerosols and describing the hazards associated with aerosols
4. Washing hands prior to and following laboratories and at any time contamination is suspected
5. Using universal precautions with blood and other body fluids and following the requirements of the OSHA Bloodborne Pathogen Standard
6. Disinfecting lab benches and equipment prior to and at the conclusion of each lab session, using an appropriate disinfectant and allowing a suitable contact time
7. Identifying and proper disposing of different types of waste
8. Reading and signing a laboratory safety agreement indicating that the student has read and understands the safety rules of the laboratory
9. Good lab practice, including returning materials to proper locations, proper care and handling of equipment, and keeping the bench top clear of extraneous materials
10. Protective procedures, including
    - Tying long hair back, wearing personal protective equipment (eye protection, coats, gloves, closed shoes; glasses may be preferred to contact lenses), and using such equipment in appropriate situations
    - Always using appropriate pipetting devices and understanding that mouth pipetting is forbidden
    - Never eating or drinking in the laboratory
    - Never applying cosmetics, handling contact lenses, or placing objects (fingers, pencils, etc.) in the mouth or touching the face
11. Emergency procedures, including
    - Locating and properly using emergency equipment (eye wash stations, first aid kits, fire extinguishers, chemical safety showers, telephones, and emergency numbers)
    - Reporting all injuries immediately to the instructor
    - Following proper steps in the event of an emergency

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Details of the assessment of student achievement are left to the discretion of the individual instructor. However, a substantial part of the assessment (not to exceed 50%) should be based on evaluation of Laboratory Skills. The assessment of Theory and Laboratory Skills should be based on a variety of measures, including, where feasible, testing, written papers, oral communication, and practical applications of knowledge or skills.
General Course Requirements and Recommendations
Students should complete at least one major laboratory project that requires experimental design, application of laboratory techniques and analysis of data (*e.g.*, identification of an unknown organism). Students should participate in exercises that require them to express their understanding of microbiological concepts.

Texts
Texts will be chosen from generally recognized microbiology texts.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for BIO 251

BIO270 - Exercise Physiology

Overview

Subject
Biology

Academic Department
Biological Science

School
Science, Tech, Engr & Math

Course Description
Explores the physiological principles of exercise with emphasis on the circulatory, respiratory, and muscular systems. Discusses what changes occur to the body during exercise and as a result of regular exercise. Establishes a scientific basis for how to prescribe exercise appropriately. Laboratory activities include measurement of oxygen uptake, fat and muscle composition, anaerobic ability, and muscular strength.

Course Pre-requisite(s)
BIO233 Anatomy and Physiology I and BIO234 Anatomy and Physiology II

Credit Hours
4

Total Contact Hours
Total Instructor Contact Hours:
77

Total Student Contact Hours:
77

Course Fee
30

Academic Level
Undergraduate

Goals, Topics, and Objectives

Course Goals
To develop a scientific understanding for the principles of exercise.
Core Course Topics

1. Common Measurements in Exercise Physiology

   Describe the measurement of work, power, energy expenditure, and economy.
2. Bioenergetics of Exercise

   Examine the differences in aerobic and anaerobic exercise.
3. Exercise and the Immune System

   Summarize the effect exercise has on the immune system.
4. The Nervous Systems Control of Movement

   Explain the role of the nervous system in muscle contraction.
5. Respiration During Exercise

   Describe the structure and mechanics of breathing during exercise.
6. Circulatory Response to Exercise

   Examine the circulatory systems response to exercise.
7. Nutrition and Energy

   Examine the role of nutrition in energy production.
8. Body Composition and its Role in Performance

   Evaluate methods of measuring body composition.
9. Exercise in Challenging Environments

   Evaluate how to exercise safely in the heat, cold, and at high altitudes.
10. Ergogenic Aids to Performance

    Evaluate the effectiveness of various pharmacological and nutritional aids to performance.
11. Laboratory - Health Screening

    Demonstrate measurement of blood pressure, heart rate, and resting and exercise electrocardiogram.
12. Laboratory - Pulmonary Function

    Evaluate static and dynamic pulmonary function.
13. Laboratory - Measurement of VO2max

    Compare estimates of VO2max.
14. Laboratory - Body Composition Assessment

    Calculate lean body mass and fat mass.
15. Laboratory - Measurement of Muscular Power

    Graph the differences in aerobic and anaerobic power in classmates.
16. Laboratory - Measurement of Absolute and Relative Muscular Strength

    Explain the differences in absolute and relative muscular strength.
17. Laboratory - Electromyography

    Conclude the primary muscle mover in several exercises.

Describe the measurement of work, power, energy expenditure, and economy.
Examine the differences in aerobic and anaerobic exercise.
Summarize the effect exercise has on the immune system.
Explain the role of the nervous system in muscle contraction.
Describe the structure and mechanics of breathing during exercise.
Examine the circulatory systems response to exercise.
Examine the role of nutrition in energy production.
Evaluate methods of measuring body composition.

Evaluate how to exercise safely in the heat, cold, and at high altitudes.

Evaluate the effectiveness of various pharmacological and nutritional aids to performance.

Demonstrate measurement of blood pressure, heart rate, and resting and exercise electrocardiogram.

Evaluate static and dynamic pulmonary function.

Compare estimates of VO2max.

Calculate lean body mass and fat mass.

Graph the differences in aerobic and anaerobic power in classmates.

Explain the differences in absolute and relative muscular strength.

Conclude the primary muscle mover in several exercises.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of academic achievement may include, but not be limited to case studies, quizzes, lab reports, group projects, individual projects, discussions, essays, and exams.

Texts
Chosen at the discretion of the instructor.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for BIO 270

BLDA100 - Introduction to Autocad

Overview

Subject
Architecture/Construction Tech

Academic Department
Building Sciences

School
Business, Entrepreneurshp, PD

Course Description
This course introduces students to the built environment and the fundamentals of computer aided design as practiced in the field of architecture. The core competencies of plan, elevation, and section will be studied and developed using Autocad software to draw architectural floor plans, elevations, and construction details. Emphasis will be placed on the relationship of architectural views to the construction process.

Credit Hours
4

Total Contact Hours
Total Instructor Contact Hours:
77

Total Student Contact Hours:
77

Course Fee
60

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Interview

Credit for Prior College Level Learning (CPCLL) Details
Interview given in department-by-department faculty. Faculty will interview applicants based on submitted portfolio and will assess against evaluation rubric. Evaluation rubric and student checklist located in department office.

Goals, Topics, and Objectives

Course Goals
The goal of this course is to introduce students to the fields of architecture and construction and to develop skills using Autocad software to create architectural drawings as part of the construction process.

Core Course Topics

1. Introduction to the built environment
2. Measurement, scale, and geometric construction
3. Use Autocad software to draw plan and elevation drawings
4. Use Autocad software to draw construction details
5. Annotation and dimensioning
6. Architectural documentation

Describe the stages of a project from conceptualization to finished construction.

Define the role of design professionals, contractors, and trades people in relation to the built environment.

Define the imperial measurement system.

Explain the concept of architectural scale.

Construct geometric shapes using the appropriate method for each shape.

Draw residential floor plans.

Draw residential building elevations.

Draw construction details.

Draw residential building sections.

Draw all required annotation on construction documents.

Dimension construction documents following industry standards.

Organize architectural views to create balanced sheet layouts.

Print construction documents correctly based on scale and line weight.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
The following assessment tools will be common to all sections:

- Assignments
- Quizzes
- Final Exam

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for BLDA 100

BLDA110 - Visual Communications

Overview

Subject
Architecture/Construction Tech

Academic Department
Building Sciences

School
Business, Entrepreneurshp, PD

Course Description
This course introduces students to a project based, hands on approach to visual communication in the fields of architecture and design. Traditional and digital methods and techniques will be used to explore basic principles of design, color theory, image production, composition, 3D modeling, lighting, and scene creation. Students will develop and present design projects using both digital media, and print media.

Credit Hours
4

Total Contact Hours

Total Instructor Contact Hours:
77

Total Student Contact Hours:
77

Course Fee
60

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Interview

Credit for Prior College Level Learning (CPCLL) Details
Interview, given in department-by-department faculty. Faculty will interview applicants based on submitted portfolio and will assess against evaluation rubric. Evaluation rubric and student checklist located in The School of Business, Entrepreneurship, & Professional Development office.

Goals, Topics, and Objectives

Course Goals
Students will be empowered to design, create, and present original, and composite design projects to prospective clients and employers.

Core Course Topics

1. Graphic Principles, Concepts and Terminology
2. Traditional visual communication
3. Digital Modeling
4. Architectural scene creation
5. Tradigital Visual communication
6. Architectural presentation graphics
7. Architectural portfolio

Identify Examples of design elements in existing architecture and art
Apply basic color theory techniques to create a composite image
Identify examples of exemplary layout and composition in existing art and architecture
Develop 2D and 3D sketches
Sketch & render traditional elements of architectural entourage
Render 3D objects with shade and shadow
Develop basic and advanced 3D geometry using architectural modeling software
Create models of architectural objects using architectural drawings and images
Create, edit, and apply materials to digital geometry and models.
Create, and place architectural components and entourage in an architectural model
Locate cameras, and create scenes that properly present architecture.
Place lights, and create shadows that are geographically appropriate for each scene.
Develop composite images, using photographs, digital creations, and hand rendered images
Create digital presentations for large audiences
Create, print, and prepare presentation boards using composite images
Using graphics created in all ACT classes, students will create and present a digital, and physical architectural portfolio.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement

- Projects
- Presentations
- Portfolio

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for BLDA 110

BLDA120 - Introduction to Carpentry

Overview

Subject
Architecture/Construction Tech

Academic Department
Building Sciences

School
Business, Entrepreneurshp, PD

Course Description
An introductory carpentry course developing the skills needed to perform layout, measurement, cutting, and fastening operations. These core competencies will be developed through individual projects. Emphasis will be placed on the safe and proper use of hand and power tools, proper layout, accuracy, and developing a sense of craftsmanship.

Credit Hours
4

Total Contact Hours
Total Instructor Contact Hours:
77

Total Student Contact Hours:
77

Course Fee
60

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Interview

Credit for Prior College Level Learning (CPCLL) Details
The student interview must provide evidence that illustrates competency in all course learning objectives. Interview will be given in the department-by-department faculty. Faculty will interview applicants and assess against an evaluation rubric. Evaluation rubric and student checklist located in department office. Applicant may bring supporting evidence (pictures, letters, etc.) to the interview to support their request for credit.

Goals, Topics, and Objectives

Course Goals
The goal of this course is to introduce the student to the tools and procedures used to fabricate millwork and cabinetry in the construction industry.

Core Course Topics
1. Wood as a building material
2. Measurement, layout, and accuracy
3. Proper use of hand and power tools
4. Project design and material estimating
5. Hand and power tool skill development
6. Finish carpentry techniques

Describe the properties of wood and wood products used in the construction industry.

Explain the impact of wood properties.

Define the imperial measurement system.

Explain different procedures used for material layout.

Demonstrate accuracy related to individual projects.

Demonstrate the proper use of hand tools.

Demonstrate the proper use of power tools.

Design individual projects.

Document project design ideas.

Estimate required material needed to complete individual projects.

Develop proficiency using hand tools to complete individual projects.

Demonstrate proficiency using power tools to accurately process materials.

Analyze required fabrication techniques used in project assembly.

Demonstrate proficiency in multiple joining techniques.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
The following assessment tools will be common to all sections: 1) Assignments2) Quizzes3) Final Exam

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for BLDA 120

BLDA130 - Introduction to Revit

Overview

Subject
Architecture/Construction Tech

Academic Department
Building Sciences

School
Business, Entrepreneurshp, PD

Course Description
This course introduces students to the built environment using Building Information Modeling (BIM) software. In this class students will use Revit software to construct three dimensional building models as a base to create floor plans, elevations, and construction details. Emphasis will be placed on the relationship of three dimensional modeling to the overall construction documentation process.

Credit Hours
4

Total Contact Hours
Total Instructor Contact Hours:
77

Total Student Contact Hours:
77

Course Fee
60

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Interview

Credit for Prior College Level Learning (CPCLL) Details
Interview given in department-by-department faculty. Faculty will interview applicants based on submitted portfolio and will assess against evaluation rubric. Evaluation rubric and student checklist located in department office.

Goals, Topics, and Objectives

Course Goals
The goal of this course is to introduce students to Building Information Modeling (BIM) software and the development of two-dimensional architectural drawings based on a three-dimensional building model.

Core Course Topics
1. Develop three-dimensional building models
2. Use Revit software to create two-dimensional architectural views
3. Anotation and Dimension
4. Basic family creation using Revit software
5. Architectural documentation

Construct building models consisting of walls, floors, ceilings, and roofs

Develop camera views of building models for presentation and discussion

Evaluate building models for accuracy

Create floor plans

Modify building elevations

Develop building sections

Develop construction details

Draw all required annotation on construction documents

Dimension construction documents following industry standards

Develop basic parametric families

Modify family properties

Evaluate effectiveness of finished families

Organize architectural views to create balanced sheet layouts

Print construction documents correctly based on scale and line weight

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
The following assessment tools will be common to all sections:
1) Assignments 2) Quizzes 3) Final Exam

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for BLDA 130

BLDA135 - Soils and Foundations

Overview

Subject
Architecture/Construction Tech

Academic Department
Building Sciences

School
Business, Entrepreneurshp, PD

Course Description
This course examines the principles and behaviors of soils in construction. Topics include the study of physical and mechanical properties of soils, design considerations, and construction applications. Laboratory and field tests are performed, along with an introduction to design principles of concrete and foundations.

Credit Hours
4

Total Contact Hours

Total Instructor Contact Hours:
77

Total Student Contact Hours:
77

Course Fee
60

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Interview

Credit for Prior College Level Learning (CPCLL) Details
Interview

Goals, Topics, and Objectives

Core Course Topics

1. Soil composition and terminology
2. Soil types and structure
3. Properties of soils
4. Soil Classification
5. Engineering properties of soil
6. Soil Reports
7. Fundamentals of concrete
8. Shallow foundations
9. Deep foundations

Define soil material constituents and their origins.

Define the major soil types.

Identify shapes and sizes of particles to help determine soil types.

Assess the relationship of clay and water and the chemical composition of clays.

Define the basic soil structure, and explain how it relates to soil groupings and types.

Employ the indexing properties of soils, and explain how they relate to type and condition of soil, strength, and the compressibility of the soil.

Calculate the relative density of a soil.

Interpret the different classification systems of soils, including the United Soil Classification System and the American Association of State Highway and Transportation Officials (AASHTO) System.

Determine the plasticity index and the liquid limit of a soil sample.

Categorize the various methods of obtaining soil samples from the field.

Differentiate the effects of water on soils.

Appraise the common drainage and dewatering techniques used.

Apply how drainage is applied in construction, including the use of foundation drains, blanket drains, interceptor drains, filters, synthetic fabrics, land drainage, and soil percolation.

Define frost heave in soils.

Describe various methods of soil sampling.

Interpret and apply data from a soils report.

Create concrete test samples demonstrating proper concrete mix ratios.

Perform concrete compressive strength tests.

Identify and describe shallow foundations.

Identify and describe deep foundations.

Assessment, Requirements, and Outcomes

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for BLDA 135

BLDA140 - Construction Systems 1

Overview

Subject
Architecture/Construction Tech

Academic Department
Building Sciences

School
Business, Entrepreneurshp, PD

Course Description
This class focuses on both residential and commercial construction framing systems, techniques, materials and methods. Course work will be a mix of hands on construction, physical modeling, digital modeling, and building detailing.

Credit Hours
4

Total Contact Hours
Total Instructor Contact Hours:
77

Total Student Contact Hours:
77

Course Fee
60

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Interview

Credit for Prior College Level Learning (CPCLL) Details
Interview, given in department-by-department faculty. Faculty will interview applicants based on submitted portfolio and will assess against evaluation rubric. Evaluation rubric and student checklist located in School of Business, Entrepreneurship, and Professional Development office.

Goals, Topics, and Objectives

Course Goals
Students will gain a basic knowledge of both residential and commercial materials, and methods for structural foundations and framing

Core Course Topics

1. Residential and commercial foundation materials and systems
2. Framing methods and materials
3. Traditional and engineered wood products
4. Floor framing
5. Wall framing
6. Sheathing and engineered panel products
7. Framing openings
8. Rafters & trusses
9. Residential and Commercial Fasteners

Identify residential and commercial foundation types.
Design and install residential and commercial foundation systems.
Identify and install Structural framing members for both residential and commercial applications.
Identify and install engineered wood products in both residential and commercial applications.
Using traditional construction documents, layout and assemble a traditional floor frame.
Using traditional construction documents, layout and assemble a traditional wall assembly.
Add Windows, doors and openings to a traditional wall layout.
Demonstrate an understanding of structural bracing.
Identify and install structural sheathing and bracing.
Calculate the the requirements for structural headers and beams.
Identify residential and commercial truss components and assemblies.
Design and install structural trusses.
Identify, select, and install appropriate fasteners for various architectural connections.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement

- Projects
- Assignments
- Exams

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for BLDA 140

BLDA150 - Environmental Bldg Systems

Overview

Subject
Architecture/Construction Tech

Academic Department
Building Sciences

School
Business, Entrepreneurshp, PD

Course Description
This course combines building systems design with fabrication and installation. Students will design mechanical, electrical, and plumbing systems based on design data, building codes, and sustainability. Students will also complete heat loss calculations and analyse building materials based on their thermal qualities. The practical fabrication and installation of plumbing and electrical systems will take place in the lab as it relates to the design of these systems. Emphasis will be on the interrelationship of environmental building systems and the challenges they pose to the designer related to building performance.

Course Pre-requisite(s)
BLDA100 Introduction to Autocad

Credit Hours
4

Total Contact Hours
Total Instructor Contact Hours:
77

Total Student Contact Hours:
77

Course Fee
60

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Interview

Credit for Prior College Level Learning (CPCLL) Details
Interview given in department-by-department faculty. Faculty will interview applicants and will assess against evaluation rubric. Evaluation rubric and student checklist located in department office.

Goals, Topics, and Objectives

Course Goals
The goal of this course is to introduce students to the design of mechanical, electrical, and plumbing systems and to develop an appreciation for the interrelationship of these systems to the built environment.

Core Course Topics

1. Heat loss calculations
2. HVAC systems and duct design
3. HVAC documentation
4. Supply water and drainage system design
5. Plumbing systems documentation
6. Plumbing system fabrication and installation
7. Electrical system design
8. Electrical system documentation
9. Electrical fabrication and installation

Analyze the thermal properties of construction materials.

Develop heat loss calculations for a residential structure.

Analyze the benefits of different heating systems.

Design supply and return air duct systems.

Draw a supply and return air duct system.

Annotate HVAC floor plans following industry standards.

Print HVAC drawings using correct scale and line weights.

Explain the plumbing codes as they relate to residential supply water and drainage systems.

Summarize the benefits of different plumbing materials.

Draw supply water and drainage systems.

Annotate plumbing floor plans following industry standards.

Print plumbing drawings using correct scale and line weights.

Following provided blueprints and using PEX piping, install a supply water system.

Following provided blueprints and using PVC piping, install a drainage system.

Demonstrate proper plumbing joining techniques using multiple materials.

Explain the electrical codes (NEC) related to residential design.

Develop a residential electrical floor plan.

Draw an electrical floor plan including all required lights, switches, and receptacles.

Annotate an electrical floor plan following industry standards.

Print electrical drawings using correct scale and line weights.

Following provided blueprints, install lights, switches, and receptacles.

Following provided blueprints, install an electric service panel.

Connect all lights, switches, and receptacles to the service panel.

Test the electrical installation for proper circuitry.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
The following assessment tools will be common to all sections: 1) Assignments2) Quizzes3) Final Exam.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for BLDA 150

BLDA230 - Residential Studio

Overview

Subject
Architecture/Construction Tech

Academic Department
Building Sciences

School
Business, Entrepreneurshp, PD

Course Description
This studio course continues the study of the built environment. Students learn design fundamentals as they relate to design challenges within a residential structure including vertical circulation, detailing, and the space planning. Topics covered include design, layout, material selection, detailing, and documentation. Using three-dimensional design software, students will use modeling to solve design problems and create plan, elevation, and section views as part of the architectural design and documentation process. Emphasis will be placed on the use of digital and physical modeling to blend functionality, aesthetics, and sustainability.

Course Pre-requisite(s)
BLDA130 Introduction to Revit

Credit Hours
4

Total Contact Hours
Total Instructor Contact Hours:
77

Total Student Contact Hours:
77

Course Fee
60

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Interview

Credit for Prior College Level Learning (CPCLL) Details
Interview given in department-by-department faculty. Faculty will interview applicants and assess against evaluation rubric. Evaluation rubric and student checklist located in department office.

Goals, Topics, and Objectives

Course Goals
The goal of this course is to introduce students to basic design fundamentals used in developing and documenting functional and aesthetically pleasing design solutions in a residential structure.

Core Course Topics

1. Detailing and design fundamentals
2. Vertical circulation design
3. Fenestration design and detailing
4. Space planning and documentation
5. Presentation and Construction document development

Determine client design requirements.

Develop design development drawings.

Determine proper level of detailing and documentation.

Design a stair layout using digital modeling software.

Explain the building codes related to stair design.

Compare different stair and railing construction techniques.

Select stair and railing components from vendor websites.

Design door and window layouts for a given space.

Explain the building codes related to means of egress.

Compare the functionality of different door and window types.

Analyze fenestration design as it relates to style and sustainability.

Design and draw a kitchen layout for a given space.

Design and draw a bathroom layout for a given space.

Design and draw a home office for a given space.

Draw required views to support space planning layouts.

Annotate and dimension construction documents.

Organize architectural views to create a balanced sheet layout.

Print construction documents correctly based on line weight and scale.

Print and display design development documents.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement

- Assignments
- Quizzes
- Final Exam

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for BLDA 230

BLDA240 - Construction Systems 2

Overview

Subject
Architecture/Construction Tech

Academic Department
Building Sciences

School
Business, Entrepreneurshp, PD

Course Description
This course focuses on building enclosure and performance with reference to finish systems, geographic location, cost, and proper installation techniques. Topics include reading and evaluating blueprints, and working with traditional hand and power tools. Lab activities examine residential and commercial enclosure systems, including insulation, interior and exterior finishes, weather barriers, doors, windows and flashing. Emphasis will be placed on building performance and sustainability.

Credit Hours
4

Total Contact Hours
Total Instructor Contact Hours:
77

Total Student Contact Hours:
77

Course Fee
60

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Interview

Credit for Prior College Level Learning (CPCLL) Details
Interview, given in department-by-department faculty. Faculty will interview applicants based on submitted portfolio and will assess against evaluation rubric. Evaluation rubric and student checklist located in School of Business, Entrepreneurship, and Professional Development office.

Goals, Topics, and Objectives

Course Goals
The goal of this course is to properly identify, select, install and analyze various building systems to maximize building performance.

Core Course Topics
1. Doors
2. Windows
3. Cornice Details
4. Roof Systems
5. Exterior Finish Systems
6. Insulation systems and sustainability
7. Interior Finish Systems

Identify residential and commercial door assemblies and installation techniques.
Install residential doors.
Identify residential and commercial window assemblies and installation techniques.
Install residential windows.
Identify, design, and detail residential cornice sections.
Construct a residential cornice.
Identify residential and commercial roof types, styles, and systems.
Construct a residential roof system.
Identify commercial and residential exterior finish materials. Including but not limited to roofing materials, siding, and trim.
Design and construct an exterior finish system for a residence.
Identify commercial and residential materials and methods for acoustic and thermal building insulation.
Design and construct an insulated structural assembly.
Evaluate an insulated building assembly for energy efficiency and performance.
Identify interior finish materials, systems, and installation methods. Including but not limited to; drywall, paneling, finish flooring, tile, and ceilings.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
- Projects
- Assignments
- Examinations

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for BLDA 240

BLDA250 - Surveying & Site Design

Overview

Subject
Architecture/Construction Tech

Academic Department
Building Sciences

School
Business, Entrepreneurshp, PD

Course Description
This course focuses on the principles of basic land surveying and site development. Topics include basic surveying methods, common hardware, surveying tools, site analysis and site design. Course work will be a combination of hands on data collection, digital modeling and construction documentation. Students will learn the principles of linear measurement, angle and elevation measurement, topography, building layout, and site analysis and design.

Course Pre-requisite(s)
BLDA100 Introduction to Autocad

Credit Hours
4

Total Contact Hours
Total Instructor Contact Hours:
77

Total Student Contact Hours:
77

Course Fee
60

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Interview

Credit for Prior College Level Learning (CPCLL) Details
Interview, given in department-by-department faculty. Faculty will interview applicants and will assess against evaluation rubric. Evaluation rubric and student checklist located in School of Business, Entrepreneurship, and Professional Development office.

Goals, Topics, and Objectives

Course Goals
The goal of this course is to introduce students to basic surveying tools and methods, and the use of civil engineering software to create site plans and civil engineering drawings.

Core Course Topics
1. Principles of surveying
2. Surveying tools and techniques
3. Linear and angle measurement
4. Field procedure for building layout
5. Creating digital maps and topography
6. Site layout and design
7. Civil engineering documentation

Describe the different types of surveys and their uses.
Describe the acquisition of surveying data from local, state, and federal municipalities.
Accurately set up survey equipment in the field.
Use sight and digital survey equipment to gather survey data.
Define methods for linear and angle measurement.
Accurately measure linear distance and angles in the field.
Establish dimension control points in the field.
Lay out building corners and set batter boards.
Create topography maps from field data.
Lay out horizontal and vertical curves.
Draw contour map profiles from collected data.
Determine existing site conditions.
Locate and draw utilities, structure, proposed and existing conditions.
Annotate and dimension the site plan.
Organize civil engineering views to create balanced sheet layouts.
Print civil engineering documents correctly based on scale and line weights.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
- Assignments
- Quizzes
- Exams

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for BLDA 250

BLDA260 - Construction Estimating

Overview

Subject
Architecture/Construction Tech

Academic Department
Building Sciences

School
Business, Entrepreneurshp, PD

Course Description
Covers the estimation of residential and commercial construction costs using the quantity survey method. Discusses the importance of using construction documents for accurate construction cost estimating related to material and labor. Course utilizes spreadsheet applications for preparing cost estimating forms for material, labor, and other costs.

Credit Hours
4

Total Contact Hours

Total Instructor Contact Hours:
77

Total Student Contact Hours:
77

Course Fee
60

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Interview

Credit for Prior College Level Learning (CPCLL) Details
Interview, given in department-by-department faculty. Faculty will interview applicants based on submitted portfolio and will assess against evaluation rubric. Evaluation rubric and student checklist located in School of Business, Entrepreneurship, and Professional Development office.

Goals, Topics, and Objectives

Course Goals
The goal of this course is for students to identify and understand the residential and commercial project areas that must be estimated and use tools and methodologies best suited to quantify the materials, labor methods, and scheduling required for project delivery.

Core Course Topics

1. Methods for Estimating
2. Professional roles in the construction process
3. Site development and coordination
4. Foundations and Substructure
5. Superstructure
6. Exterior Finishes
7. Interior Finishes
8. Insulation and Mechanical Systems
9. The bidding process

Navigate and interpret basic architectural working drawings
Demonstrate basic calculations, including area and volume
Identify and understand basic types of estimates and their appropriate applications
Record a database of information on labor and material costs
Explain the application of mathematics and geometry in cost estimating
Identify and distinguish the roles and responsibilities of the various participants in the design and construction process
Identify and quantify the materials, methods, labor, and associated cost required for site design, development, and construction
Identify and quantify the materials, methods, labor, and associated cost required to design and construct various residential and commercial foundation systems
Identify and quantify the materials, methods, labor, and associated cost required to design and construct various residential and commercial structural and framing systems
Identify and quantify the materials, methods, labor, and associated cost required to design and construct various residential and commercial exterior finish systems, including; masonry, siding, roofing, trim, paint
Identify and quantify the materials, methods, labor, and associated cost required to design and construct various residential and commercial interior finish systems, including; drywall, paneling, flooring, ceiling finishes, paint and trim
Identify and quantify the materials, methods, labor, and associated cost required to design and construct various residential and commercial insulation systems, heating and cooling systems, plumbing and electrical systems
Develop and prepare professional estimates and bidding documents

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement

- Projects
- Assignments
- Exams

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for BLDA 260

BLDA265 - Civil Technology Studio

Overview

Subject
Architecture/Construction Tech

Academic Department
Building Sciences

School
Business, Entrepreneurshp, PD

Course Description
Students will explore the materials and methods used in the development of both civil and commercial construction projects. Students will analyze existing civil and commercial projects with a focus on the development of project specific details centered on material use, performance, and adherence to industry specific design guidelines. Projects will include: bridges, roadways, commercial site development, and civil construction details.

Course Pre-requisite(s)
BLDA250 Surveying & Site Design

Credit Hours
4

Total Contact Hours
Total Instructor Contact Hours:
77

Total Student Contact Hours:
77

Course Fee
60

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Interview

Credit for Prior College Level Learning (CPCLL) Details
Interview

Goals, Topics, and Objectives

Core Course Topics

1. Materials and methods used to assemble components of commercial and civil construction projects.
2. Performance properties of materials within a structural assembly
3. Projects specifications, standards, and details
4. Construction detailing
5. Construction Documentation
6. Construction standards and codes

Demonstrate an understanding of multiple materials, based on their physical properties, and performance under different environmental and structural conditions.

Demonstrate an understanding of how different materials perform in a structural assembly. For example, reinforcing steel in foundations and structural concrete, expansion joints in roadways

Using local design standards for roadways, bridges, and other civil construction projects, create project specific details for commercial and civil projects that include: bridges, parking lots, storm drainage systems, roadway design, and utility layout and design.

Analyze existing construction projects and documents to develop construction details that adhere to industry standard principles of design and construction.

Demonstrate an understanding of traditional detailing techniques, including the use of lineweights, textures, and notation.

Develop a set of construction documents and details that demonstrate an understanding of the use of multiple materials in a structural assembly.

Demonstrate an understanding of proper material size, location and relationship in a structural assembly.

Demonstrate the ability to use local codes and building standards as a reference to develop commercial and civil design details.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement

- Assignments
- Quizzes
- Exams

Grading Scale
Letter GradePercentage:

90-100%=A

80-89%=B

70-79%=C

60-69%=D

0-59%=E

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for BLDA 265

BLDA270 - Commercial Design Studio

Overview

Subject
Architecture/Construction Tech

Academic Department
Building Sciences

School
Business, Entrepreneurshp, PD

Course Description
Explores how to develop a commercial building for an assigned building site and use. Simulates "real-world" experiences in the transition from design to construction documents. Includes site planning, design development and a partial set of construction documents with plans, elevations, sections and details. Revit software is utilized for document production.

Course Pre-requisite(s)
BLDA130 Introduction to Revit

Credit Hours
4

Total Contact Hours
Total Instructor Contact Hours:
77

Total Student Contact Hours:
77

Course Fee
60

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Interview

Credit for Prior College Level Learning (CPCLL) Details
Interview

Goals, Topics, and Objectives

Course Goals
The goal of this course is to develop an understanding of commercial design and construction from basic site layout to detailed construction document drawings.

Core Course Topics

1. Pre-Design Processes
2. Site Design
3. Building Schematic Design Development
4. Building Design Development
5. Commercial Detailing

Discuss the beginning processes for a commercial project including obtaining an architectural survey and appropriate soil exploration and testing.

Given a project site location and survey, develop an analysis of the site including information regarding zoning, soils, weather, solar positioning, topography, various sensory impressions, existing vegetation, circulation, adjacencies that may impact the design process.

Develop a site plan and supporting documentation and views suitable for actual submittal to the city based on posted submittal requirements.

Present, orally and visually, the site and project proposal as if given to the city planning commission.

Develop a schematic design development package, including; floor plans, elevations, and building sections

Develop a design development package of information including; exterior and interior material selections, wall types, floor(s), ceiling(s) and roof assemblies, glass and glazing assemblies, doors and windows, various MEP fixtures, a structural framing plan and a typical exterior wall section.

Translate design sketches into usable commercial construction details.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Lab Projects

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for BLDA 270

BLDA280 - Bldg Science Capstone

Overview

Subject
Architecture/Construction Tech

Academic Department
Building Sciences

School
Business, Entrepreneurshp, PD

Course Description
This studio class focuses on both residential and commercial building structural systems, techniques, materials and methods; including soils, foundations, substructure, and superstructure. Studio work will be a mix of hands on construction, physical modeling, digital modeling, building detailing, and analysis.

Course Pre-requisite(s)
BLDA130 Introduction to Revit

Credit Hours
4

Total Contact Hours
Total Instructor Contact Hours:
77

Total Student Contact Hours:
77

Course Fee
60

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Interview

Credit for Prior College Level Learning (CPCLL) Details
Interview, given in department-by-department faculty. Faculty will interview applicants based on submitted portfolio and will assess against evaluation rubric. Evaluation rubric and student checklist located in School of Business, Entrepreneurship, and Professional Development office.

Goals, Topics, and Objectives

Core Course Topics
1. Professional practice and employability
2. Project Management
3. Design and Presentation
4. Design Development
5. Construction Documentation

Demonstrate the ability to work effectively with a client

Demonstrate professional oral, written, and presentation skills

Create a schedule for the completion and implementation of an architectural project

Track project completion and update schedules for deliverables as required

Develop a set of design presentation drawings

Present a design proposal to a client

Select the appropriate construction materials and systems in residential and commercial projects.

Demonstrate knowledge of sustainable materials and energy efficient systems in residential and commercial projects.

Prepare a series of residential or commercial construction documents utilizing current industry software and accepted architectural standards and techniques.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
- Lab projects
- Assignments

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for BLDA 280

BLDE100 - Energy Industry Fundamentals

Overview

Subject
Energy Technology

Academic Department
Building Sciences

School
Business, Entrepreneurshp, PD

Course Description
Covers basic emerging principles and concepts that affect the energy industry, compliance with safety and health procedures, how electric power and natural gas generation, transmission, and distribution work, and entry-level energy careers. Students will gain an understanding of the energy industry as a prerequisite to occupation-specific knowledge and an understanding of the careers available in the energy industry.

Course Pre-requisite(s)
Eligible to take ENG courses at HFC

Credit Hours
4

Total Contact Hours
Total Instructor Contact Hours:
92

Total Student Contact Hours:
92

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other Exam

Goals, Topics, and Objectives

Core Course Topics
- History and Organization of the U.S. Energy Industry
- Safety in the Energy Industry
- Electric Power Generation
- Electric Power Transmission and Distribution
- Energy Industry Fundamentals
- Careers
- Applied Math

Define the structure and organization of the Energy Industry.

Identify safety practices in the Energy Industry.

Identify electric power generation systems.

Differentiate between hydro, solar, wind, biofuel and geothermal energy.*

Differentiate between the various areas of employment and employment qualifications defined by the energy industry.

Demonstrate applied math skills (ratios and proportions, fractions, decimals, measurement, etc.)*

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
- Assignments
- Quizzes
- Final Exam

Texts
To be determined by departmental faculty.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for BLDE 100

BLDE101 - Introduction to Energy Technology

Overview

Subject
Energy Technology

Academic Department
Building Sciences

School
Business, Entrepreneurshp, PD

Course Description
Introduces traditional sources of energy and provides an overview of the various forms of energy and their applications. Covers alternative, renewable, and traditional non-renewable sources of energy with consideration for energy conservation and use and energy transmission systems.

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Interview

Credit for Prior College Level Learning (CPCLL) Details
Interview

Goals, Topics, and Objectives

Core Course Topics

1. Introduction to Energy Technologies
2. Renewable and Inexhaustible Energy Sources
3. Non-Renewable Energy Sources
4. Energy, Power, and the Environment
5. Energy and Power conversions as applied in Building Technologies and Industrial Technology Programs (DOE-EERE)

Describe various energy sources and the basics of force, work and power

Describe Solar, thermal, solar voltaic, geothermal, wind, biomass, generation, and power co generation

Describe Fossil Fuels, Petroleum, Natural Gas, and Nuclear Energy

Compare various energy technologies from an environmental and economic standpoint

Demonstrate knowledge of the US and SI systems of measurement and convert from one system to another

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
The following assessment tools will be common to all sections: Assignments Quizzes Final Exam
Grading Scale

- 90-100 = A
- 80-89 = B
- 70-79 = C
- 60-69 = D
- 0 - 59 = E

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for BLDE 101

BLDE103 - AC/DC Electricity

Overview

Subject
Energy Technology

Academic Department
Building Sciences

School
Business, Entrepreneurshp, PD

Course Description
Covers the fundamentals of DC and AC circuits and circuit calculations. Examines electrical definitions, units of electrical measure, use of meters, series and parallel resistive circuits, capacitance, and inductance. Also explores basic wiring techniques and how to troubleshoot circuit faults.

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Interview

Credit for Prior College Level Learning (CPCLL) Details
Interview

Goals, Topics, and Objectives

Core Course Topics

1. DC and AC Electricity
2. Electrical Safety
3. Series/Parallel Circuits
4. Ohm's Law/Power Formula
5. Electrical Components
6. Electrical Wiring

Describe concepts of AC theory, and be able to differentiate it from DC

Describe concepts of basic electricity theory; and define terms voltage, current, resistance, and power

Demonstrate in labs and on exams basic electrical safety

Describe concepts of series and parallel circuits, and explain the differences between them

Demonstrate a working knowledge of how and why conductor size and type affect the flow of current; be able to calculate proper conductor size in a circuit

Calculate line loss in an electrical conductor, good conductors vs. poor conductors, and semi-conductors

Demonstrate transformers, resistors, and relays/contactors usage

Demonstrate proper wiring techniques for basic AC and Dc projects

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
The following assessment tools will be common to all sections:

- Assignments
- Quizzes
- Final Exam

Grading Scale

- 90-100 = A
- 80-89 = B
- 70-79 =C
- 60-69 = D
- 0 - 59 = E

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for BLDE 103

BLDE115 - Heating Technology

Overview

Subject
Energy Technology

Academic Department
Building Sciences

School
Business, Entrepreneurshp, PD

Course Description
Prepares students to work on residential and light commercial gas, oil, and electric forced-air and hot-water heating systems and related equipment. Explains standard equipment and systems, how to provide service checks, and the preliminary skills needed to installation, repair, and replace heating equipment using appropriate service tools and instruments. Laboratory activities included.

Credit Hours
2

Total Contact Hours
Total Instructor Contact Hours:
62

Total Student Contact Hours:
62

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics
1. Basic Heating/Air Conditioning
2. Unit Orientation
3. Electrical/Wiring Diagrams for Heating Applications
4. Gas Furnace Controls
5. Gas Furnace Planned Service Checks
6. Troubleshooting Furnace Circuits
7. Troubleshooting Other Furnace Components
8. Forced Air Furnaces
9. Installation
10. Ignition Systems and Components
11. Heating Unit Troubleshooting and Service
12. Heating Unit Manufacturer Data Packages

Identify standard components of a heating system and their purpose.

Analyze relevant electrical diagrams.

Differentiate between forced air and hydronic heating systems.

Describe venting and drain systems associated with heating units.

Differentiate between various controls associated with heating systems.

Describe installation procedures.

Describe standard servicing and troubleshooting procedures.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
- Lecture/demonstration and online web site generated research
- Text-generated scenarios
- Team collaborative projects
- Hands-on laboratory exercises
- Internet activities and research
- Problem solving through scenarios

Texts
To be determined by instructor.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for BLDE 115

BLDE131 - Heating Technology

Overview

Subject
Energy Technology

Academic Department
Building Sciences

School
Business, Entrepreneurshp, PD

Course Description
Prepares students to work on residential and light commercial gas, oil, and electric forced-air and hot-water heating systems and related equipment. Explains standard equipment and systems, how to provide service checks, and the preliminary skills needed to install, repair, and replace heating equipment using appropriate service tools and instruments. Extensive laboratory activities.

Credit Hours
4

Total Contact Hours
Total Instructor Contact Hours:
62

Total Student Contact Hours:
62

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Interview

Credit for Prior College Level Learning (CPCLL) Details
Interview

Goals, Topics, and Objectives

Core Course Topics
1. Basic Heating/Air Conditioning
2. Unit Orientation
3. Electrical/Wiring Diagrams for Heating Applications
4. Forced Air Furnaces
5. Installation
6. Troubleshooting
7. Other Furnace Components

Identify standard components of a heating system and their purpose

Analyze relevant electrical diagrams

Differentiate between various controls associated with heating systems

Describe installation procedures

Describe standard servicing and troubleshooting procedures

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
The following assessment tools will be common to all sections:
- Assignments
- Quizzes
- Final Exam

General Course Requirements and Recommendations
90-10 = A

80-89 = B

70-79 =C

60-69 = D

0 - 59 = E

Grading Scale
- 90-100 = A
- 80-89 = B
- 70-79 =C
- 60-69 = D
- 0 - 59 = E

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for BLDE 131

BLDE150 - Construction Blueprint Reading

Overview

Subject
Energy Technology

Academic Department
Building Sciences

School
Business, Entrepreneurshp, PD

Course Description
Explores mechanical (HVAC), architectural, and electrical drawings required for energy technology, plumbing and pipefitting, electrical, and construction related trades. Covers print reading, interpreting common symbols, working notes, views, and title blocks. Introduces project management and estimating. Note: Basic measurement and math skills required for print reading section.

Credit Hours
2

Total Contact Hours
Total Instructor Contact Hours:
32

Total Student Contact Hours:
32

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Reading mechanical and architectural prints for construction
2. Reading SI measurements and scale sizing of construction blueprints using basic math skills
3. Reading blueprint symbols related to mechanical and architectural trades
4. Reading mechanical and architectural blueprints according to print location grids

Demonstrate the difference between construction architectural prints and mechanical factory/shop prints.

Demonstrate and understand the scale sizes of different prints.

Apply fraction reducing skills to reading measuring scales and tapes.

Calculate the conversion between US standards and SI units.

Identify specific sections on blueprints.

Demonstrate the use of grid systems on prints.

Explain important note information on prints.

Describe extra notes on drawings.

Differentiate between different drawing views.

Describe the purpose and use clouded areas on blueprints.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Each student must complete the weekly assigned chapter readings and questions at the end of each chapter. The reading and questions build on each of the skill sharpening sessions (5) and are the stepping stones toward the final. If this work is not completed each skills sharpening session will become more difficult and will be reflected when the student takes the final. Those that complete the weekly assignments will find this class not that difficult. Classroom verbal reading will be required along with a verbal review of each chapter every week. Skill Sharpening Sessions must be attended and completed or 10 points will be deducted for every week missed and not completed (late assessment). All skills sharpening sessions must be made up. It is your responsibility, not the instructor's, to make other arrangements.
Texts
To be determined by instructor.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for BLDE 150

BLDE151 - Air Conditioning Technology

Overview

Subject
Energy Technology

Academic Department
Building Sciences

School
Business, Entrepreneurshp, PD

Course Description
Prepares students to be multi-level service technicians for residential HVAC equipment. Emphasizes hands-on troubleshooting and maintaining residential total systems. Covers a combination of heating and air-conditioning systems including system design and layout, equipment selection, duct sizing, venting, air balancing and adjustments, air quality control, psychometrics of air conditioning systems, applied installation, and repair of total systems. Also discusses electrical diagrams.

Credit Hours
4

Total Contact Hours
Total Instructor Contact Hours:
62

Total Student Contact Hours:
62

Course Fee
25

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Interview

Credit for Prior College Level Learning (CPCLL) Details
Interview

Goals, Topics, and Objectives

Core Course Topics

1. Cooling systems residential and commercial.
2. Psychometrics
3. AC Service and Maintenance

Explain basic air conditioning fundamentals

Explain basic refrigeration principles and components

Demonstrate and apply principles of air distribution and psycho-metrics

Calculate load calculation

Demonstrate the principles and operations of residential HVAC systems

Demonstrate ability to work on residential HVAC systems and perform concise HVAC service reports

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
The following assessment tools will be common to all sections:

- Assignments
- Quizzes
- Final Exam

Grading Scale

- 90-100 = A
- 80-89 = B
- 70-79 =C
- 60-69 = D
- 0 - 59 = E

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for BLDE 151

BLDE200 - Commercial Heating

Overview

Subject
Energy Technology

Academic Department
Building Sciences

School
Business, Entrepreneurshp, PD

Course Description
An advanced-level course in light commercial heating, large commercial-industrial burners, light commercial rooftop units, building and plant commercial-industrial heating controls, equipment, and systems. Discusses possible functions, operations, and components related to pneumatic, electronic, and direct digital control (DDC) building control systems. Also addresses use of controls to optimize energy savings. Laboratory activities.

Credit Hours
4

Total Contact Hours
Total Instructor Contact Hours:
62

Total Student Contact Hours:
62

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Interview

Credit for Prior College Level Learning (CPCLL) Details
Interview

Goals, Topics, and Objectives

Core Course Topics

1. Building & Plant Commercial-Industrial Heating Systems
2. Light Commercial Heating System
3. VVTs, VAVs, FPBs
4. Electrical Control Systems
5. Control Systems/DDC
6. BAS Retrofit/Building Maintenance

Identify the best practices, standards and the characteristics for operation and maintenance to show acceptable familiarity with typical power and process systems and equipment

Apply the principles of light commercial heating including fuel system design, air distribution, design, and the operation of electric resistance, forced air, hydronic, and steam heating systems

Perform installation, start-up checking, and operational tests as required by manufacturer's specifications and local and federal codes

Install and service the heating systems of packaged air-conditioning units, commercial and industrial oil and gas burners, and large heating unit flame safeguard control systems

Differentiate between single zone system, VVTs, VAVs, and FPBs

Explain the principle behind and usage of VVTs/controls

Demonstrate the principle behind and the usage of VAVs/controls

Demonstrate the principle behind and the usage of FPBs/controls

Explain relevant electrical/mechanical systems and how they work.

Demonstrate pneumatic systems and how various air pressure relate to the system working properly in day, night, summer, and winter modes

Demonstrate an understanding of the set up and function of of digital systems

Explain BAS and what systems are controlled in the commercial buildings

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
The following assessment tools will be common to all sections:

- Assignments
- Quizzes
- Final Exam

Grading Scale

- 90-100 = A
- 80-89 = B
- 70-79 =C
- 60-69 = D
- 0 - 59 = E

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for BLDE 200

BLDE202 - Electric Field Service Meterin

Overview

Subject
Energy Technology

Academic Department
Building Sciences

School
Business, Entrepreneurshp, PD

Course Description
An introduction course on kilowatt-hour meters and meter operations. Several devices, procedures, and metering concepts are presented including basic electrical theory and electrical circuit meter diagrams associated with testing and connection devices. Students will become familiar with automatic compensations and adjustments built into watt-hour meters to maintain meter accuracy. Various instrument transformer applications are discussed. Students will be able to identify and demonstrate personal and electrical safety procedures for testing and diagnostics at various metering installations.

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Safety
2. Watthour Meter Principles
3. Poly-Phase Metering Systems
4. Current, Voltage, Instrument Transformers - Metering
5. Poly-Phase Rated Transformer Principles
6. Field Meter Installation Checks and Inspections
7. Watthour Meters- Principles of Accuracy Testing
8. Self-Contained Poly-Phase Meter Testing
9. Demand Meters and Reactive Meters
10. Customer Relations - High Bill Complaints
11. Energy Diversion - Identification and Notification

Identify the various types of watthour meters used in an electric field installation and their purpose in delivering quality electric service.*

Identify the various types of instrument transformers and their function in providing proper current and voltage in an electric field metering system.*

Draw an electrical diagram, identifying how connections are made from meter to testing equipment, including metering components.*

Identify and define three different types of single and poly-phase metering configurations utilized.

Define the function of compensation and adjustments built into watthour metering systems.

Identify the steps of troubleshooting a meter and methods for identifying single, three-phase, poly-phase, and self-contained meter installations.

Define how a meter is protected against tampering and weather/animal/insect conditions.*

Define the application of current transformer class ratings, turns and current ratios and polarity testing methods.*

Identify and define the testing and calibration techniques of the various types of single-phase transformer-rated meters and the equipment used to conduct these tests.*

Identify safe isolation/protective procedures for inspection and testing of metering equipment, and demonstrate how a meter can be isolated utilizing appropriate tools/equipment.*

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Labs, Assignments, Quizzes, Tests
Texts
To be determined by instructor.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for BLDE 202

BLDE203 - Natural Gas Distribution and Maintenance

Overview

Subject
Energy Technology

Academic Department
Building Sciences

School
Business, Entrepreneurshp, PD

Course Description
An introduction course on the fundamentals of natural gas distribution and maintenance. Topics to be covered are: Safety, proper excavation procedures, corrosion and pipe protection, gas leaks, mechanical joining, service line repairs and renewals, and main repair and fitting.

Course Pre-requisite(s)
TAMA110 Industrial Appl of Basic Math, or its equivalent, or higher

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Safety
2. Excavation/Underground
3. Corrosion and Pipe Protection
4. Leaks
5. Mechanical Joining
6. Service Line Repairs and Renewals
7. Main Repairs and Fittings

Identify PPE.

Define the proper approach towards hazards commonly found on the job.

Define personal and on-the-job safety practices.

Identify traffic safety and worksite set up procedures.

Identify steps that must be taken prior to digging.

Identify common digging practices and equipment.

Define "behind the curb" (BC), "building a wall", and "street cut" terminology.

Identify post-construction work tasks.

Demonstrate how to read a map.

Demonstrate how to locate piping.

Identify the surveillance and damage prevention processes.

Define abnormal operating conditions.

Define Corrosion.

Identify the effects of corrosion.

Identify the different levels in the Spectrum of Corrosion.

Define corrosion control and monitoring.

Demonstrate how to perform a combustible gas indicator (CGI).

Define the leak detection process.

Define the proper response to a leak.

Define the leak grading process (3 levels).

Identify the various joining techniques.

Demonstrate pipe/tube joining.

Identify when the various methods of mechanical joining are used.

Identify the types of service line repairs.

Identify the preferred method for completing service line repairs.

Identify the steps for performing sevice line installations.

Identify the common fittings, clamps, and tees used to perform service line tasks.

Identify the types of "Main Repairs".

Identify the preferred methods of repair.

Identify the fittings used in "Main Repair".

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement

- Tests
- Quizzes
- Assignments
- Labs

Texts
To be determined by instructor.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for BLDE 203

BLDE205 - Refrigeration Technology

Overview

Subject
Energy Technology

Academic Department
Building Sciences

School
Business, Entrepreneurshp, PD

Course Description
Prepares students as multi-level service technicians in the refrigeration field. Covers basic refrigeration system design and the components for various domestic, residential, and light commercial systems. Discusses refrigeration system tools, materials, and instruments. Also covers advanced electrical wiring, refrigeration characteristics, charging, evacuation, dehydration, and refrigerant recovery. Course work includes hands-on wiring and circuit troubleshooting related to both mechanical and electrical components. The EPA Section 608 Technician Certification test in refrigerant reclamation is given at the conclusion of the semester.

Credit Hours
4

Total Contact Hours
Total Instructor Contact Hours:
62

Total Student Contact Hours:
62

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Interview

Credit for Prior College Level Learning (CPCLL) Details
Interview

Goals, Topics, and Objectives

Core Course Topics
1. Circuit wiring
2. Refrigeration 608 certification
3. Commercial refrigeration electrical circuits
4. Basic Commercial Refrigeration
5. Refrigeration system troubleshooting
6. Refrigeration system piping

Demonstrate use of air conditioning simple and advanced electrical schematics.

Identify and prepare pictorial and ladder refrigeration electrical schematics.

Set up and wire electrical refrigeration diagrams in the laboratory.

Demonstrate Refrigerant Recovery/EPA 608 requirements.

Complete EPA section 608 certification exam.

Describe the concepts of series parallel circuits used in Pump Down Systems.

Create Electrical-Pictorial (wiring diagram) and Ladder (elementary diagram), showing conduits, components, and functional circuits, both power and control.

Develop a Mechanical Outline of the unit, showing the location of major and minor components and showing the refrigeration cycle and systems connected with it.

Describe Sequence of Operation: List all steps for starting and shutting down and for basic operation of the unit.

Arrange Troubleshooting Functional Breakdown: Identify all systems within the unit which will be isolated or checked during troubleshooting operations. List components within each system

Demonstrate use of Trane's Refrigeration Manual for sizing piping for a commercial air conditioning remote system.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
The following assessment tools will be common to all sections:

- Assignments
- Quizzes
- Final Exam

Grading Scale
- 90-100 = A
- 80-89 = B
- 70-79 =C
- 60-69 = D
- 0 - 59 = E

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for BLDE 205

BLDE207 - Underground Distribution

Overview

Subject
Energy Technology

Academic Department
Building Sciences

School
Business, Entrepreneurshp, PD

Course Description
Designed as an introduction to operation and maintenance of underground electrical distribution systems. Electrical theory application for various distribution cables and underground cabinet terminations, cable splicing techniques and troubleshooting of underground circuits are explored. Distribution transformer applications are discussed. Students will be able to identify and demonstrate personal and electrical safety procedures utilized in switching, isolating, testing and diagnostic applications.

Course Pre-requisite(s)
TAMA110 Industrial Appl of Basic Math or higher

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics
1. Introduction to Underground Electrical Distribution Systems
2. Safety
3. Underground Cables, Splicing, Terminations, and Tools
4. Installation of Underground Systems - Source and Load
5. Grounding, Draining, and Bonding Applications
6. Underground Distribution Transformers - Live-Front and Dead Front
7. Fusing and Protective Devices - Principles and Application
8. Testing and Maintenance of Underground Switchgear
9. Underground Troubleshooting, Switching and Isolating
10. Protective Procedures for Work on Underground Distribution Equipment

Identify the various types of cables used in an underground electric field installation and their purpose in delivering quality electric service.*

Identify the various types of distribution transformers and their application in providing proper current and voltage in an underground system.*

Draw an electrical schematic diagram, identifying how connections are made from source to load, including cables, switch cabinets, and various protective devices.*

Identify two different types of underground switching cabinets including switching procedures utilized.*

Define the steps of troubleshooting an underground distribution circuit and methods for identifying fault location and isolating/restoration techniques. *

Identify how a pad-mounted transformer is protected on source and load sides and disconnecting techniques.*

Define the application of current transformers, voltage transformers and relay testing methods.*

Identify and describe the inspection, tests, and maintenance of the various types of distribution cables and the equipment used to conduct these tests.*

Describe sources of electrical and physical hazards at a transformer installation site, and methods of current /voltage protection for working on associated equipment.*

Create an operating sequence for switching to de-energize and isolate an underground distribution cable.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Labs, quizzes, tests, and assignments.
Texts
To be determined by instructor.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for BLDE 207

BLDE208 - Overhead Distribution

Overview

Subject
Energy Technology

Academic Department
Building Sciences

School
Business, Entrepreneurshp, PD

Course Description
Designed as an introduction to operation and maintenance of overhead electrical distribution systems. Electrical theory application for various distribution line construction and overhead line configurations, energizing and de-energizing techniques, troubleshooting, and grounding of overhead circuits are explored. Single and three phase distribution transformer applications are discussed. Students will be able to identify and demonstrate personal and electrical safety procedures utilized in overhead distribution switching, isolating, testing and diagnostic applications. Overhead service and power quality issues are analyzed in relation to balanced loading and overall customer satisfaction.

Course Pre-requisite(s)
TAMA110 Industrial Appl of Basic Math

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
430

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Safety Practices
2. Overhead Distribution Lines, Construction, Terminations, and Line Tools
3. Installation of Overhead Distribution Systems - Source and Load
4. Grounding, Shorting, and Bonding Applications
5. Overhead Distribution Transformers - Single and Three Phase
6. Fusing and Line Protective Devices - Principles and Application
7. Testing and Maintenance of Overhead Switchgear
8. Overhead Distribution Troubleshooting, Switching, and Isolating
9. Protective Procedures for Work on Overhead Distribution Equipment

Identify the various types of power and neutral conductors used in an overhead electric field installation and their purpose in delivering quality electric service.

Identify the various types of distribution transformers and their application in providing proper current and voltage in an overhead distribution system.

Draw an electrical schematic diagram, identifying how connections are made from source to load, including power conductors, single/three phase transformers and switches, and various line protective devices.

Identify three different types of overhead switching equipment including procedures utilized for isolating and in-line replacement.

Define the steps of troubleshooting an overhead distribution circuit and methods for identifying fault location and isolating/restoration techniques.

Identify how a three-phase transformer is protected on source and load sides and disconnecting/isolating techniques.

Define the application of overhead distribution current transformers, voltage transformers, relay applications and testing methods.

Identify and describe the inspection, tests, and maintenance of the various types of distribution circuit protection devices and the equipment used to conduct these tests.

Define sources of electrical and physical hazards at a transformer installation site, and methods of current /voltage protection for working on associated equipment.

Create an operating sequence for switching to de-energize and isolate a portion of an overhead distribution circuit.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Labs, quizzes, tests, assignments
Texts
To be determined by instructor.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for BLDE 208

BLDE240 - Energy Systems Design

Overview

Subject
Energy Technology

Academic Department
Building Sciences

School
Business, Entrepreneurshp, PD

Course Description
Examines the design principles of heating, cooling, and hydronic systems. Topics include both residential and commercial heat loss and gain, equipment selection, duct design, piping design, and air terminal selection.

Credit Hours
4

Total Contact Hours
Total Instructor Contact Hours:
62

Total Student Contact Hours:
62

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Interview

Credit for Prior College Level Learning (CPCLL) Details
Interview

Goals, Topics, and Objectives

Core Course Topics

1. Heat loss and heat gain calculations.
2. Selection of heating and cooling equipment.
3. Duct design layouts meeting industry duct design standards
4. Construction documents
5. Air balancing methods.
6. Selecting grilles. registers and diffusers

Calculate heat loss/heat gain for residential buildings HVAC systems.

Compare and select the appropriate heating and cooling equipment for a specified need.

Demonstrate lay out an effective duct design that will meet all current design standards and codes.

Develop a set of industry specific construction documents describing the environmental control systems

Demonstrate the ability to properly locate heating and cooling equipment on property according to mechanical codes and ordinances.

Calculate the flow rate for a building, individual rooms and the main trunk lines for supply and return ducts, branch lines and terminals.

Distinguish between and select registers, grilles, and diffusers by their cfm, spread, and throw requirement.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
The following assessment tools will be common to all sections:

- Assignments
- Quizzes
- Final Exam

Grading Scale

- 90-100 = A
- 80-89 = B
- 70-79 =C
- 60-69 = D
- 0 - 59 = E

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for BLDE 240

BLDE250 - Energy Audit & Certification

Overview

Subject
Energy Technology

Academic Department
Building Sciences

School
Business, Entrepreneurshp, PD

Course Description
For students seeking to become BPI certified residential energy auditors or to understand the principles of energy auditing. Includes training in the principles of energy transfer, building envelopes, energy auditing, air leakage, insulation, windows and doors, heating systems, cooling systems, indoor air quality, lighting, appliances, and water heating. Students will gain the skills required to perform building inspections and make cost effective recommendations for improving energy efficiency. At the conclusion of this class students will be able to sit for the Building Performance Institute (BPI) theory written test for Building Analyst certification.

Credit Hours
4

Total Contact Hours
Total Instructor Contact Hours:
62

Total Student Contact Hours:
62

Course Fee
450

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Interview

Credit for Prior College Level Learning (CPCLL) Details
Interview

Goals, Topics, and Objectives

Core Course Topics
1. Residential Energy Use and Codes
2. Energy equipment and construction techniques
3. Building Shell and Energy Assessment
4. Energy Improvement
5. BPI Certification

Demonstrate an understanding of energy use, conservation, and management.

Describe knowledge of local and state building codes.

Describe basic knowledge of construction related to residential dwellings.

Ability to work with basic tools, heating test equipment, and a blower door.

Identify window types, and performance ratings.

Identify different types of residential insulation, and describe relative performance issues and opportunities.

Identify construction related issues related to air leakage and infiltration.

Identify and describe water heating systems and describe their impact on energy consumption.

Identify and describe various types of lighting and describe their impact on energy consumption.

Evaluate methods for reducing energy costs and improving building efficiency.

Analyze the overall condition and efficiency of heating and cooling systems.

Analyze the overall efficiency of a home and identify primary areas of air leakage in walls, ceilings and foundations.

Demonstrate energy savings through sealed windows, doors and other openings in a residential home including fireplaces, attic hatches and electrical outlets.

Prepare a plan for addressing future upgrades to the building including an economic analysis of payback periods for each planned upgrade.

Demonstrate the knowledge required to pass the BPI certification exam.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
The following assessment tools will be common to all sections:

- Assignments
- Quizzes
- Final Exam

Grading Scale
- 90-100 = A
- 80-89 = B
- 70-79 =C
- 60-69 = D
- 0 - 59 = E

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for BLDE 250

BLDE260 - Energy Systems Management

Overview

Subject
Energy Technology

Academic Department
Building Sciences

School
Business, Entrepreneurshp, PD

Course Description
Presents the technical, economic, and regulatory aspects of energy efficient building energy management. Explores the latest energy and cost-reduction strategies. Focuses on laboratory exercises designed to simulate residential and commercial energy systems.

Course Pre-requisite(s)
Either: ENT-103, ENT-104, ENT-105, ENT-108, ENT 109, ENT 113, and ENT-119, or BLDE-110, BLDE115 Heating Technology, BLDE-120, BLDE-125, BLDE130 Heating&CoolingMechanicalCode, BLDE-135, BLDE-140, and BLDE-145, or Instructor Permission

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Academic Level
Undergraduate

Goals, Topics, and Objectives

Course Goals
To expose the student to energy audits for residential and commercial buildings. This relates to the student being able to suggest energy-saving techniques. The student will use Microsoft PowerPoint as part of learned presentation skills.

Core Course Topics
1. Energy Codes and energy conservation
2. Principles of auditing buildings
3. Building Energy Auditing Tools
4. Building structure print reading
5. Energy Conservation Management
6. Energy Saving Techniques
7. Energy managers financial application methods
8. Life cycling and return on investment

Develop an appropriate energy management plans for residential (R), classified buildings.*

Evaluate, calculate, and make recommendations for savings on electric bills.*

Create appropriate load management scenarios for selected commercial buildings, final project outcome.

Demonstrate the basic sequence of operations required for energy efficient load management of buildings.

Calculate a return on investment over the life cycle of the equipment.*

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Labs, quizzes, tests, assignments

Texts
To be determined by instructor.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for BLDE 260

BLDE282 - Substation Operation and Maintenance

Overview

Subject
Energy Technology

Academic Department
Building Sciences

School
Business, Entrepreneurshp, PD

Course Description
Introduces the operation and maintenance of substations and switchyards, and discusses commonly used equipment and and the roles of various field personnel. Topics include safety practices, power transformers, circuit breakers, system performance, and substation batteries.

Course Pre-requisite(s)
TAMA110 Industrial Appl of Basic Math, its equivalent, or higher.

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics
1. Safety
2. Power Transformers
3. Circuit Breakers
4. System Performance
5. Substation Batteries

Identify the various types of transformers.*

Identify the various types of circuit breakers, reclosers, sectionalizers, and fuses and their function in a substation distribution system.*

Draw an electrical power-flow diagram, including how electricity is distributed from source to load, and line protective devices.

Describe the different types of substation and switchyard configurations utilized.

Describe the function of substation DC control systems.

Describe the steps of a substation switching operation and methods of restoration.

Describe how a substation is protected against fault conditions.*

Describe the application and relative sequence of reclosers, sectionalizers, and fuses.*

Identify and describe the operation of the various types of capacitors, reactors, and fused disconnects utilized in a substation.*

Identify safe isolation for work and maintenance of substation equipment, and explain how they can be isolated utilizing appropriate test equipment.*

Demonstrate grounding methods and levels of fault current protection for substations.

Create an operating sequence for isolating, testing, and inspection of a substation breaker.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
As a part of this course, students will be assessed through:

- Quizzes
- Tests
- Labs
- Assignments

Texts
To be determined by instructor.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for BLDE 282

BLDE295 - N American Technician Excellence Certifi

Overview

Subject
Energy Technology

Academic Department
Building Sciences

School
Business, Entrepreneurshp, PD

Course Description
Explores various types of basic work knowledge of the Heating, Ventilation, Air Conditioning and Refrigeration (HVACR) systems that are installed in the HVACR field. Topics covered include safety, trade tools, heat and matter, electrical fundamentals, transformers and motors, electrical diagrams, and proper use of required test instruments. As a result of this class, students will learn about the structure and HVACR communication skills expected of them in the technology and skilled trade industry. This course helps to prepare students to take the NATE Core Certification Exam based on ACCA, NATE, and RSES information.

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
50

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Interview

Credit for Prior College Level Learning (CPCLL) Details
Interview

Goals, Topics, and Objectives

Core Course Topics
1. Safety
2. Trade Tools
3. Heat and Matter
4. Electrical Fundamentals
5. Electrical Diagrams
6. Selecting and properly using required test instruments

Perform basic mathematical calculations.

Identify and demonstrate the use of proper tools for each job/task. *

Demonstrate proper safety procedures.

Demonstrate basic electrical fundamentals and how to read wiring diagrams.*

Demonstrate proper use of test instruments

Assessment, Requirements, and Outcomes

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for BLDE 295

BLDE298 - Special Topics in Energy Technology

Overview

Subject
Energy Technology

Academic Department
Building Sciences

School
Business, Entrepreneurshp, PD

Course Description
Explores selected topics as determined by the academic department and the instructor with emphasis on current energy technology trends. Specific special topics are announced together with the prerequisites each term. The student can repeat the course when different topics are offered, earning credit for each different topic. Course may be used toward fulfilling the specific degree requirements for an associate degree or certificate.

Credit Hours
1

Total Contact Hours
Total Instructor Contact Hours:
16

Total Student Contact Hours:
16

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics
To be determined by instructor.

To be developed by the instructor for each individual offering.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
All students will be required to complete a comprehensive final examination that assesses the learning of course objectives. This exam must be weighted in a manner so that this exam score is worth a minimum of fifteen percent of the final course grade. All additional assessment of student achievement is left to instructor discretion.

General Course Requirements and Recommendations
To be determined by the instructor. Detailed course syllabi for each section must be approved by the School prior to the course being offered. A copy of the specific course syllabi will be presented to AALC and the Curriculum Committee "for information only," at the first meeting after the beginning of the term the course is offered.

Texts
To be determined by instructor

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for BLDE 298

BLDE299 - Special Topics in Energy Technology

Overview

Subject
Energy Technology

Academic Department
Building Sciences

School
Business, Entrepreneurshp, PD

Course Description
Explores selected topics as determined by the academic department and the instructor with emphasis on current energy technology trends. Specific special topics are announced together with the prerequisites each term. The student can repeat the course when different topics are offered, earning credit for each different topic. Course may be used toward fulfilling the specific degree requirements for an associate degree or certificate.

Credit Hours
1

Total Contact Hours
Total Instructor Contact Hours:
16

Total Student Contact Hours:
16

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics
To be determined by instructor.

To be developed by the instructor for each individual offering.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
All students will be required to complete a comprehensive final examination that assesses the learning of course objectives. This exam must be weighted in a manner so that this exam score is worth a minimum of fifteen percent of the final course grade. All additional assessment of student achievement is left to instructor discretion.

General Course Requirements and Recommendations
To be determined by the instructor. Detailed course syllabi for each section must be approved by the School prior to the course being offered. A copy of the specific course syllabi will be presented to AALC and the Curriculum Committee "for information only," at the first meeting after the beginning of the term the course is offered.

Texts
To be determined by instructor.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for BLDE 299

BLDI120 - Principles of Design

Overview

Subject
Interior Design

Academic Department
Building Sciences

School
Business, Entrepreneurshp, PD

Course Description
An introduction to the principles and elements of design that provide the foundation for aesthetic concepts in the interior design profession. Development of professional visual presentation techniques through the creation of interior design boards and models. Introduction to the design process and aesthetic conceptualization techniques.

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
20

Academic Level
Undergraduate

General Education Category
Humanities and Fine Arts

Michigan Transfer Agreement (MTA) Category
Category 5: Humanities and Fine Arts - Applied Degrees, Category 5: Humanities and Fine Arts - Transfer Degrees

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
Determined by department.

Goals, Topics, and Objectives

Course Goals
To introduce students to design principles and elements as they relate to interiors. The course will also instruct students in the design process and techniques used in creating and presenting aesthetic concepts. Students will acquire technical and artistic skills necessary to produce quality presentation boards and models.

Core Course Topics
1. Interior design profession and career options.
2. Design vocabulary; written aesthetic concept statements and professional presentations
3. Principles and elements of design as they relate to interiors
4. Examination of acclaimed interior designers, architects and their work for the enhancement and development of students' personal style, sophistication and creativity.
5. ight-step design process
6. Visual presentation techniques
7. Interiors sample boards, quality craftsmanship and proficiency in graphic presentation.
8. Scaled models of residential structures.

Identify various career options, educational requirements, certifications, licensing, organizations and associations for interior design professionals.

Employ strong design vocabulary and communication skills as they pertain to interiors, including presentation outlines and concept statements in written, oral and visual presentations.

Assess and critique photographs of residential and commercial interiors in professional design magazines or in digital format, identifying the elements and principles of design used by the interior designer or architect.

Exhibit an enhanced level of personal style, sophistication and creativity developed through critiques of a broad range of interior environments.

Define the eight phases of the interior design process.

Demonstrate an ability to create innovative, professional quality presentation boards conveying aesthetic concepts.

Employ craftsmanship and professional graphic composition in the construction of presentation boards.

Construct a scaled model residential structure.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
- Mid-Term and Final Exams
- Exercises and Assignments
- Concept and presentation boards
- Model building

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for BLDI 120

BLDI130 - Design & User Needs

Overview

Subject
Interior Design

Academic Department
Building Sciences

School
Business, Entrepreneurshp, PD

Course Description
Introduces human factors as they affect the design of interior environments including physiological, sociological, and psychological needs of users. Emphasizes the human factors of ergonomics, anthropometrics, universal design, and special populations as they relate to design standards, functionality, accessibility, and impact on the interior design practice.

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
20

Academic Level
Undergraduate

General Education Category
Humanities and Fine Arts

Michigan Transfer Agreement (MTA) Category
Category 5: Humanities and Fine Arts - Transfer Degrees, Category 5: Humanities and Fine Arts - Applied Degrees

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
Determined by department

Goals, Topics, and Objectives

Course Goals
To introduce students to human factors, ADA and universal design, environmental psychology and consideration of user needs for special populations. Students will learn to consider user needs as a primary factor in the design of the built environment through hands-on experiences and design research methods.

Core Course Topics

- Foundational theories of Environmental Psychology: explore environmental and behavioral theories including the development of self-actualization pyramids using criteria established by Abraham Maslow.
- The psychology of behavior: territoriality, personal space, proxemics, crowding, and privacy.
- Wayfinding and cognitive mapping.
- Human dimensions and anthropometrics, and their impact on workplace function and productivity.
- Designing environments to meet the needs of persons with physical and cognitive disabilities.
- Human perception and environmental design with emphasis on how culture, education, economics, and ethnicity may impact interior environments.
- Conducting and presenting scholarly research findings on topics related to the design of various environments and population segments.
- Introduction to ADA and Universal Design and their impact on the built environment.
- Analysis of functionality in the design of residential and commercial settings and the psychological connection between users and their environments.

Define terminology related to environmental design, user needs, design theory and environmental psychology.
Demonstrate, through hands-on activities and written documentation, the impact that proxemics, territoriality, privacy, and stress have on human behavior and the appropriate design response to these concerns.
Exhibit, through hands-on activities and written documentation, the issues surrounding wayfinding.
Apply the use of anthropometrics and ergonomics in the design of interior spaces and furnishings to improve function and productivity.
Identify connections between human physiological and cognitive disabilities with their subsequent impact on the design of the built environment.
Identify how sociological issues such as culture, education, economics, and ethnicity may create special needs for an interior environment.
Demonstrate an ability to research psychological and physiological design needs for special populations such as people with disabilities, children, elders, and homeless or low income individuals and families.
Identify the Americans with Disabilities Act, Accessible and Universal Design, and their impact on the built environment.
Demonstrate, through hands-on activities, presentations and written documentation, an ability to critique interior environments for human factor issues.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement

- Mid-Term and Final Exams
- Hands-on Exercises and Assignments
- Semester Project

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for BLDI 130

BLDI140 - Interior Design Materials & Components

Overview

Subject
Interior Design

Academic Department
Building Sciences

School
Business, Entrepreneurshp, PD

Course Description
Investigates the characteristics, properties, and uses of materials, components and construction methods as specified by interior designers. Emphasizes performance, use, maintenance, and sustainability of materials and finishes. Also explores quantity calculations, installation methods, workroom practices, and resource development.

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Academic Level
Undergraduate

General Education Category
Humanities and Fine Arts

Michigan Transfer Agreement (MTA) Category
Category 5: Humanities and Fine Arts - Applied Degrees, Category 5: Humanities and Fine Arts - Transfer Degrees

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
Determined by department

Goals, Topics, and Objectives

Course Goals
To familiarize students with a broad range of products, materials, and construction methods used in the creation of interior environments. Guest speakers will provide detailed product knowledge, and serve as a resource for student contact database. Field trips and Internet research will assist in the selection of appropriate materials. Calculation, quantification, and installation of materials will be explored. Students will learn the consequences of unit packaging and the potential for product waste.

Core Course Topics
1. Characteristics and properties of residential and commercial interior materials and components.
2. Properties, characteristics and appropriate use of materials, finishes and furnishings.
3. Identify, classify, and analyze interior materials and products to determine if they meet user needs.
4. Carpet layout, yardage calculations, and installation methods.
5. Calculate wallcovering quantity requirements taking into account wall dimensions, pattern repeat, unit packaging, and product waste.
6. Guest speakers representing diverse interior product manufacturers will supplement textbook readings and lectures providing technical information.
7. Sustainable materials, environmentally responsible design and the LEED rating system.
8. Analyze and assess the appropriateness of the finishes and materials specified for flooring, walls, cabinetry, countertops, ceilings, doors, millwork and textiles.

Identify appropriate interior materials and finishes based upon user need, cost, product durability, maintenance and environmental impact.

Describe the properties and characteristics of materials and furnishings including textiles, wallcoverings, flooring materials, millwork, cabinetry, and other interior materials.

Recognize appropriate materials and product that meet user needs for a specific interior installation.

Analyze interior spaces to determine carpet layouts for appropriate seaming.

Calculate and specify various products and materials in residential and commercial settings.

Calculate and specify product and material quantities as they relate to unit packaging.

Produce and maintain a contact/resource file for present and future product information and assistance.

Identify sustainable products, materials, furniture, fixtures and finishes. and exhibit a basic working knowledge of the LEED process and credits related to interiors.

Recognize and critique existing residential and commercial interior surfaces for durability, functionality, wear, need for repair or replacement and sustainability properties.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
- Quizzes and Exams
- Assignments
- Projects

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for BLDI 140

BLDI150 - Lighting & Environmental Systems Interio

Overview

Subject
Interior Design

Academic Department
Building Sciences

School
Business, Entrepreneurshp, PD

Course Description
Introduces the fundamentals of lighting design and basic understanding of acoustical, electrical, plumbing, and climate control systems and their impact on environmental, energy and economic issues. Emphasizes lighting design process, principles and theories, light sources, lamps, and energy conservation.

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
20

Academic Level
Undergraduate

General Education Category
Humanities and Fine Arts

Michigan Transfer Agreement (MTA) Category
Category 5: Humanities and Fine Arts - Applied Degrees, Category 5: Humanities and Fine Arts - Transfer Degrees

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
Provide, in writing, a request to the department indicating the proposed rationale for requesting credit and describing the type of college-level learning upon which the request is based.

Submit work and documentation to substantiate the request.

Schedule an interview with the appropriate instructor(s) to discuss the request.

Upon review of the request, and documentation, the department will make a determination whether credit will be granted.

Goals, Topics, and Objectives

Course Goals
To provide students with knowledge and skills to resolve lighting design problems and gain basic understanding of mechanical systems and their environmental, energy and economic impact on interior design. Developing a working knowledge of these environmental systems so as to effectively communicate and collaborate with subcontractors throughout the design process. Students will explore building codes, perform lighting and energy calculations and examine construction practices in residential and commercial installations and integrate lighting as a major component in a commercial design project.

Core Course Topics
1. Environmental systems: lighting, electrical, plumbing, acoustical, and HVAC.
2. Open office acoustical and lighting systems, fire detection, alarms, sprinkler systems, emergency lighting, HVAC, and other mechanical systems.
3. Construction drawings and lighting plans, plenum requirements as they relate to HVAC and air-supply options, plumbing, electrical fire suppression and other mechanical systems.
4. Safety building codes: doors, framing, glazing, partitions, corridor and stairway fire-resistance-ratings, fire protection, emergency lighting and life safety codes including exiting and egress requirement.
5. Sick building syndrome, indoor-air-quality contaminants, water quality, visual and acoustic comfort, thermal comfort and cooling systems.
6. Electrical and lighting energy usage, plumbing fixtures, water distribution, waste piping and water usage, HVAC, indoor air quality, efficiency and conservation, sustainability and LEED credits.
7. U.S. Green Building Council LEED rating system, Energy Star label and American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE).
8. Lighting terminology, definitions, switching types, wiring, locations and codes, conduct measurements, and lighting calculations.
9. Functional and aesthetic lighting of interior spaces through the use of general, task and accent lights; incandescent, fiber optics and LED lights.
10. Reflected ceiling plans and standard electrical symbols.
11. Tear sheets and lighting specifications, fire suppression equipment, and switches.

Identify and define major building mechanical systems using technical terminology.

Critically analyze the constraints various environmental mechanical systems may place upon design solutions and evaluate the implications of altering existing structures.*

Apply knowledge of functionality, installation, usage, and building codes for lighting and environmental systems in developing reflected ceiling plans for a commercial setting.*

Identify and define applicable building code requirements for the protection of public health, safety, and welfare.

Assess the environmental impact of construction and mechanical systems.*

Identify and define sustainability as it relates to energy efficient mechanical systems, construction and installation techniques and indoor air quality.

Illustrate a basic understanding of the LEED rating system established by the U.S. Green Building Council, U.S. EPA Energy Star label, and other green certification agencies.

Conduct lighting measurements and calculations.*

Design innovative psychological and physiological lighting effects.

Demonstrate proficiency in graphic presentation of design solutions.

Synthesize design principles, lighting research and technical information in the resolution of lighting design problems.*

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement

- Assignments
- Collaborative Research:
    - Current Trends in Sustainable Mechanical Systems
- Quizzes and Exams
- Visits to construction sites

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for BLDI 150

BLDI200 - Bath Design Studio

Overview

Subject
Interior Design

Academic Department
Building Sciences

School
Business, Entrepreneurshp, PD

Course Description
Course integrates the interior design process into large-scale residential and commercial bath design projects focusing on functional and aesthetic elements and the integral relationship to user needs, incorporating human factors and environmentally responsible design.

Course Pre-requisite(s)
BLDA100 Introduction to Autocad or Instructor Permission

Credit Hours
4

Total Contact Hours

Total Instructor Contact Hours:
77

Total Student Contact Hours:
77

Course Fee
35

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
Determined by department

Goals, Topics, and Objectives

Course Goals
This studio course will consist of bath projects wherein students will conceptualize and design luxury residential baths and commercial restrooms incorporating up-scale fixtures, products and materials creating state-of-the-art environments. Each project will require extensive research, creation of detailed programming documents, and an assessment of the mechanical and structural systems. Plumbing and electrical fixtures and equipment must be reviewed and implemented with energy and resource conservation being of utmost importance. These projects must meet the physiological and psychological needs of its users, comply with ADA guidelines and promote health, safety, and welfare of the public in general. The materials, products, finish selections and mechanical systems will also promote healthy indoor air quality and positively impact the environment in general.

Core Course Topics

1. Space plan existing residential and to-be-built commercial interior environments.
2. NKBA format for mechanical plans, floor plans, elevations, specifications and installation documents for residential baths and commercial restrooms.
3. Basic residential and commercial building codes for fire, life and safety, ADA codes and environmentally responsible fixtures, finishes, equipment and appliances.
4. Current bath design trends, innovations, products and resources.
5. Environmentally responsible design: installation techniques, manufacturers, LEED credits, energy, resource, and water conservation.
6. Universal Design Principles, ADA guidelines and ageing-in-place as they relate to residential and commercial bath environments.
7. Residential and commercial bath design formats to comply with industry standards in preparation for certification exam.
8. Further develop technical computer drawing skills using state-of-the-art Kitchen/Bath software.
9. Calculate and prepare cost estimates, budgets, and bath product specifications.
10. How to further develop oral, written, and graphic communication skills conveying aesthetic and functional concepts and construction documentation of design solutions for bath design projects.

Demonstrate an ability to critically analyze design problems through the conceptualization, development, and creation of aesthetically pleasing, functional solutions to large-scale residential and commercial bath design projects.

Exhibit proficient technical and graphic communication skills using hand-drafted and/or computer generated construction and mechanical plans, floor plans, elevations, specifications and installation documents for large-scale bath projects using industry standard bath guidelines and recommended accessible bath guidelines.

Produce construction and mechanical plans in NKBA format for residential and commercial baths incorporating plumbing, electrical, lighting and ventilation systems.

Effectively utilize resources and academic research to assess current bath products and design trends.

Critically assess the environmental impact of specifying various cabinets, appliances, fixtures. and finishes for residential and commercial bath interior design projects.

Critically assess and apply universal design principles and ADA guidelines to residential and commercial bath design projects.

Display proficiency in the preparation of hand-drafted or computer-generated schematic drawings in compliance with industry certification exam format.

Exhibit advanced technical computer skills using state-of-the-art bath design software.

Accurately estimate costs, budget, and specify bath products.

Illustrate excellence in oral, written, and graphic communication skills in the critical analysis, assessment of user needs, aesthetic and functional concept development, production of construction documents and presentation of final bath design solutions.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement

- Programming binder.
- Technical construction packets with schematic drawings.
- Story and presentation boards for residential and commercial projects.
- Written aesthetic and functional design solutions.
- Oral presentation of residential and commercial bath projects.

General Course Requirements and Recommendations
The following criteria will be required for each of the semester bath projects:

Programming Binder

- Research
- Concept Development
- Written Design Concepts
- Bath Design Guidelines

Technical Construction Packet—Hand-Drafted or Computer Generated

- Floor Plan
- Mechanical Plan
- Construction Plan
- Installation Plan
- Elevations

Storyboards and Presentation Boards

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for BLDI 200

BLDI220 - Kitchen Design Studio

Overview

Subject
Interior Design

Academic Department
Building Sciences

School
Business, Entrepreneurshp, PD

Course Description
A studio course integrating the interior design process into a large-scale kitchen design project focusing on functional and aesthetic elements and the integral relationship to user needs. Incorporates human factors and Universal Design principles.

Course Pre-requisite(s)
BLDA130 Introduction to Revit or Permission by Instructor

Credit Hours
4

Total Contact Hours

Total Instructor Contact Hours:
77

Total Student Contact Hours:
77

Course Fee
35

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
Determined by department

Goals, Topics, and Objectives

Course Goals
This studio course will consist of a large-scale, residential remodel that meets the physiological and psychological needs of virtual clients. This course will focus on rehabilitating an existing home necessitating critical assessment of existing mechanical and structural systems, the alteration of these systems and their impact on the integrity of the building's architecture. Materials, products, finish selections and installation of mechanical systems promoting healthy indoor air quality are equally imperative to the success of the project.

Core Course Topics

1. Space plans for existing and new construction residential interior environments.
2. Kitchen mechanical plans, floor plans, elevations, cabinetry section cuts, specifications and installation documents
3. Kitchen cabinetry, countertops, appliances, plumbing and electrical fixtures, finishes, and equipment.
4. Assess current kitchen design trends and innovations and acquaint students with quality kitchen products and resources though academic internet research and guest speakers.
5. Universal Design Principles, ADA guidelines, and ageing-in-place.
6. Develop technical computer drawing skills using state-of-the-art kitchen/bath software.
7. Calculate and prepare cost estimates, budgets, and kitchen product specifications.
8. Develop oral, written, and graphic communication skills conveying aesthetic and functional concepts and construction documentation of design solutions for kitchen design projects.

Demonstrate an ability to solve interior design problems through conceptualization, development and creation of functional and aesthetically pleasing designs for a large-scale kitchen project.

Create kitchen mechanical plans, floor plans, elevations, cabinetry section cuts, specifications and installation documents that meet basic residential building codes for fire, life and safety. When required for the user needs, ADA guidelines, accessibility and Universal Design Principles will be incorporated.

Exhibit technical and graphic communication skills using manual drafted and/or computer generated construction and mechanical plans, floor plans, elevations, specifications and installation documents for a large-scale kitchen using National Kitchen and Bath Association (NKBA) guidelines.

Produce basic residential kitchen construction and mechanical plans incorporating plumbing, electrical, lighting and ventilation systems.

Effectively utilize resources and academic research to assess current kitchen products and design trends.

Display proficiency in the preparation of schematic drawings in compliance with NKBA exam format.

Exhibit basic technical computer skills using current industry standard software.

Estimate costs, budget, and specify kitchen products.

Illustrate proficiency in oral, written, and graphic communication skills in the critical analysis, assessment of user needs, aesthetic and functional concept development, production of construction documents, and presentation of final kitchen design solutions.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Virtual Kitchen Projects
Assignments
Oral, written and visual presentations

General Course Requirements and Recommendations
Programming Binder

- Research

- Concept Development
- Written Design Concepts
- Kitchen Design Guidelines and Recommended Accessibility Guidelines

Technical Construction Packet—Hand-Drafted or Computer Generated

- Schematic Drawings using Industry Standard Graphic Presentation Format

Storyboards and Presentation Boards

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for BLDI 220

BLDI230 - Residential Design Studio

Overview

Subject
Interior Design

Academic Department
Building Sciences

School
Business, Entrepreneurshp, PD

Course Description
Introduces the interior design process and development of functional and aesthetically pleasing environments. Emphasizes programming, ideation, analysis, concept development, space planning, design development, documentation, and graphic communication culminating in the presentation of a residential project.

Course Pre-requisite(s)
ACT-110 or ACT116 ; or ART-181; or INTR120 or equivalent

Credit Hours
4

Total Contact Hours
Total Instructor Contact Hours:
77

Total Student Contact Hours:
77

Course Fee
35

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
Determined by department

Goals, Topics, and Objectives

Course Goals
Provide students with the knowledge and technical skills to design functional, creative and aesthetically pleasing environments. Students will design a small-scale residential project including programming documents containing aesthetic concepts and sketches, research, and written concept statements. Students will also develop schematic and construction drawings, perspective drawings and presentation boards. Final design solutions will be orally presented to jurors.

Core Course Topics

1. Existing and to-be-built residential spaces.
2. Eight-step interior design process.
3. Elements of the Programming Phase of the interior design process. Aesthetic and functional concept development through research, quick sketches, data collection, schematics, ideation and written concept statements.
4. Aesthetic and Functional Concept Storyboards.
5. Residential technical construction drawing packets including floor plan, kitchen and bath elevations, cabinet and interior sections, and furniture layout.
6. Existing space plan structural modifications, Universal Design guidelines and basic residential building codes.
7. Quality manufacturers of residential furniture, furnishings, finishes, cabinetry, flooring, plumbing, electrical, and lighting fixtures and appliances.
8. Professional sample presentation boards.
9. Product specification documents and written design statements.
10. Oral presentation techniques.

Analyze design problems in order to conceptualize, develop and create aesthetically pleasing and functional residential interiors.

Exhibit fundamental knowledge of the programming phase of the design process through documentation and compilation of research, analysis of data, and conducting ideation techniques in the development of an aesthetic concept for a residential project.

Produce and present conceptual storyboards conveying aesthetic and functional design concepts.

Demonstrate proficiency in manual drafting of floor plans, elevations, sections and furniture layouts.

Define and incorporate Universal Design principles and basic building codes into residential interior environments.

Research and differentiate the quality of residential furniture and furnishing manufacturers. Evaluate and specify residential furniture, cabinetry, and finishes.

Construct a scaled model of residential space.

Illustrate through project completion the ability to create sample boards showing evidence of successful finish, furniture, and lighting selections; display effective 3-dimensional visual representations and graphic technical documentation; exhibit effective oral and written communication skills; and demonstrate basic model building skills.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement

1. Programming notebook.
2. Space planning exercises.
3. Comprehensive residential design project.
4. Schematic and construction manual drafting packet.
5. Two and three-dimensional rendered drawings of interiors.
6. Concept storyboards.

7. Sample and presentation boards.
8. Scaled model.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for BLDI 230

BLDI270 - Commercial Design Studio

Overview

Subject
Interior Design

Academic Department
Building Sciences

School
Business, Entrepreneurshp, PD

Course Description
Explores how to integrate the interior design process into a small-scale, non-residential design project focusing on functional and aesthetic elements, and the integral relationship to user needs. Also discusses how to incorporate human factors, Universal Design principles, and building codes into the design process. Emphasizes environmentally responsible product selection and specification.

Course Pre-requisite(s)
BLDA130 Introduction to Revit or Instructor Permission

Credit Hours
4

Total Contact Hours
Total Instructor Contact Hours:
77

Total Student Contact Hours:
77

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
Determined by Faculty

Goals, Topics, and Objectives

Course Goals
To provide students with knowledge and skills to analyze and resolve design problems in non-residential settings. Students will be introduced to the concept of environmentally responsible design by incorporating Universal Design Principles and ADA codes into their projects and selecting sustainable materials using evidence based design research. Students will further develop manual and CAD graphic skills and orally present final projects to jurors. , basic_html

Core Course Topics
1. Commercial space planning.
2. Building type site visits.
3. Evidence-based design.
4. Commercial furniture, furnishings and finish specifications; basic building codes for fire, life and safety; ADA guidelines; accessibility and Universal Design Principles.
5. Environmentally responsible commercial furniture, fixtures, furnishings and finishes; LEED credits; sustainable installation methods.
6. Two and three-dimensional visual representations of commercial interiors.
7. Write highly developed programming documents, design solutions, and specifications.
8. Commercial presentation and sample boards.
9. Oral presentations.

Critically analyze design problems in order to conceptualize, develop and create aesthetically pleasing and functional commercial interiors.

Conduct site visits to identify user needs, collect data and analyze aesthetic and functional design concerns for various commercial building types.

Apply evidence-based design to the selection and specification of furniture, fixtures, furnishings, and finishes.

Assess and skillfully incorporate Universal Design Principles, ADA guidelines, and fire and basic life-safety codes into commercial design solutions.

Analyze and specify sustainable commercial furniture, fixtures, furnishings and finishes identifying availability of LEED credits.

Illustrate and further develop manual and AutoCAD drawing and presentations skills.

Apply effective written communication skills in articulating design solutions, programming, ideation, concept development product research, and specifications.

Demonstrate through project completion increased level of proficiency in graphic documentation, and the ability to create professional quality sample boards and visual presentation packages.

Exhibit enhanced oral presentation skills in conveying design solutions.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
- Programming Binder
- Construction Drawing Packet (Computer Generated)
- Perspective Drawings and Elevations (Manual or Computer Generated)
- Storyboard and Final Presentation Boards
- Research, documentation and specifications of environmentally responsible furniture and finishes

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for BLDI 270

BLDI290 - Professional Practice Interior Designers

Overview

Subject
Interior Design

Academic Department
Building Sciences

School
Business, Entrepreneurshp, PD

Course Description
Exams the interior design profession, including the study of legal, financial, and ethical business practices with special emphasis on management, human resource practices, marketing, and advertising.

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
Determined by Faculty

Goals, Topics, and Objectives

Course Goals
To provide students with knowledge of professional interior design business practices. Students will explore business models, professional ethics, accounting and record keeping, office management, human resource practices, marketing design services and advertising, project management and the bid process.

Core Course Topics

1. Interior design profession, career options, certification, professional associations, and licensing
2. Legal, financial and ethical issues in the business environment
3. Business formations, sales and income tax issues, registration of business name, advantages and disadvantages of business ownership, insurance and legal counsel
4. Financial advisors, accountants, bankers, establishing business credit, small business loans, business location, start up costs, office equipment, cash flow and budgeting
5. Office organization and management, letters of agreement, contracts, maintaining vital records, writing and submitting detailed specifications for purchasing products, installation instructions and custom design work
6. Professional design fees, determining profit margins, indirect job costs, retail/discount pricing, obtaining quotes, invoicing, FOB, delivery and installation charges
7. Bookkeeping, accounting, billing, and payroll
8. Project closeout, post-occupancy and client follow-up, warranties
9. Marketing, establishing a niche, advertising, customer service and building client relationships

Demonstrate through written construction documents, written contracts, research and critical analysis of issues relative to employment and liability, an understanding of the legal responsibilities of interior designers engaged in professional practice.

Exhibit basic understanding of the development and maintenance of financial records for an interior design practice through the development of spreadsheets in compliance with appropriate accounting principles and the requirements for filing business taxes.

Compare and contrast optional business models, marketing tools and developing desired client base through creation of a business model and company website for a mock interior design firm.

Create a mock interior design firm setting up a business model reflecting efficient office management, record keeping, specifying invoicing, purchasing, customer service, design, delivery and installation of a small commercial design project, and post occupancy evaluations.

Apply marketing and advertising techniques in the creation of a website for a mock design firm.

Analyze and discuss ethics in professional business conduct and service to the public.

Compare and contrast professional design organizations and apply to become a student member of a national interior design association or organization.

Identify and discuss career opportunities, certification, licensing and registration requirements for interior designers in the State of Michigan and research requirements for same in other states.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement

- Research and creation of interior design firm
- Interior Design Firm Website
- Professional Practice Documentation Project:
    - Manage a small design project beginning with meeting the client through post occupancy evaluation
    - Prepare invoices/letters of agreement
    - Design, select and specify furniture, finishes and lighting for a small commercial project
    - Provide samples, specifications and unit packaging and photos of all items necessary to complete the project
    - Measure, calculate, determine profit margins, invoice, purchase and deliver products to virtual clients
    - Organize and maintain vital documents

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for BLDI 290

BLW253 - Business Law and the Legal Environment

Overview

Subject
Economics & Finance

Academic Department
Business & Economics

School
Business, Entrepreneurshp, PD

Course Description
Examines a variety of legal topics including the American Legal System, the laws of contracts, business organizations, personal injury and product liability. Focuses on understanding the legal environment in which businesses function.

Course Pre-requisite(s)
ENG131 Introduction College Writing with a C grade or better

Credit Hours
4

Total Contact Hours

Total Instructor Contact Hours:
62

Total Student Contact Hours:
62

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. The American Legal System
2. Agreements and Consideration in Traditional Contracts and E-Contracts
3. Business Organizations
4. Business Liabilities

Identify sources of American Law.

Explain how a court acquires jurisdiction over a defendant.

Describe how a case proceeds through the court system, from filing the initial complaint to appeals.

Describe the elements of an enforceable contract.

Explain when contracts are not enforceable.

Discuss issues related to a written contract.

Differentiate between the ways a party's contractual duty may be discharged due to performance or breach, and the remedies available in either situation

Describe the structure of each type of business entity.

Identify the differences between each type of business entity.

Explain an owners responsibility and liability for each of the business entities.

Explain the process for forming and dissolving each type of business entity.

Describe the elements of, and then differentiate, intentional torts, negligence, and strict liability under common law.

Explain how a business may be liable for an intentional tort, negligence, or strict liability under common law.

Explain how a business might be negligent or strictly liable in a product-liability lawsuit. Explain how a business acquires debt and the rights and remedies available to its creditors.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Students will be assessed through tests, quizzes, homework, presentations, and/or class participation.

Grading Scale

LETTER GRADE	PERCENTAGE
A	93-100%
A-	90-92.9%
B+	87% - 89.9%
B	83% - 86.9%
B-	80% - 82.9%
C+	77% - 79.9%
C	73% - 76.9%
C-	70% - 72.9%
D+	67% - 69.9%
D	63% - 66.9%
D-	60% - 62.9%
E	<60%

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for BLW 253

BMA110 - Business Math

Overview

Subject
Business Administration

Academic Department
Business & Economics

School
Business, Entrepreneurshp, PD

Course Description
Presents basic math problems in business scenarios. Coursework applies mathematical concepts in various personal and business situations such as payroll, taxes, bank reconciliations, profit/loss, commissions, discounts, depreciation, interest, annuities, and loans.

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Academic Level
Undergraduate

General Education Category
Mathematics

Michigan Transfer Agreement (MTA) Category
Category 3: Mathematics - Applied Degrees

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
Minimum Departmental Exam Score

75%

Goals, Topics, and Objectives

Core Course Topics

1. Decimals and Fractions as Percents in Business
2. Payroll
3. Discounts
4. Markup
5. Simple and Compound Interest
6. Business and Consumer Loans
7. Depreciation
8. Business Statistics
9. Quantitative Literacy Learning Outcomes

Add, subtract, multiply, and divide numbers with decimals.

Calculate percentages.

Solve increase and decrease story problems related to business scenarios.

Calculate gross earnings for a variety of payroll methods including hourly, salary, piecework, and commission.

Calculate overtime earnings for a variety of payroll methods including hourly, salary, piecework, and commission.

Calculate equivalent earnings for different pay periods.

Calculate Social Security tax, Medicare tax, federal tax, and state tax on earnings.

Calculate series discounts.

Differentiate between single and series discounts.

Calculate the net cost equivalent of a series discount.

Calculate markup based on cost.

Calculate markup based on selling price.

Solve for cost or selling price based on markup.

Determine the break-even point.

Determine the amount of gross or absolute profit or loss.

Solve for simple interest.

Calculate maturity value on a simple interest account.

Solve for principal, rate, and time.

Differentiate between simple and compound interest.

Solve for compound interest.

Calculate maturity value on a compound interest account.

Estimate the value of an investment using future and present value.

Calculate finance charges based on various terms of agreement.

Calculate monthly payments, interest amounts, and payoff amounts of an installment loan, personal property loan, or real estate loan.

Use the straight-line method to solve for depreciation.

Solve for the mean, median, and mode of a list of numbers.

Computing any type of arithmetic or non- arithmetic calculation that is well defined

Analyzing information presented as tables, graphic figures, charts, etc

Creating a model to represent data or numerical information. (Deliverables: physical model, equation, graph, or table).

Applying a mathematical process to your industry or discipline specific problem.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Students will be assessed through tests, quizzes, assignments, and/or class participation.
Grading Scale

LETTER GRADE	PERCENTAGE
A	93-100%
A-	90-92.9%
B+	87% - 89.9%
B	83% - 86.9%
B-	80% - 82.9%
C+	77% - 79.9%
C	73% - 76.9%
C-	70% - 72.9%
D+	67% - 69.9%
D	63% - 66.9%
D-	60% - 62.9%
E	<60%

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for BMA 110

BSC130 - Tech Foundations Supply Chain Mgt

Overview

Subject
Supply Chain Management

Academic Department
Business & Economics

School
Business, Entrepreneurshp, PD

Course Description
Introduces students to the information necessary to be competent in the activities common across all facilities within the supply chain including safety, quality control, communications, teamwork, good workplace conduct, familiarity with the key computer systems that underpin supply chain operations, product receiving, product storage, order processing, packing and shipment, inventory control, safe handling of hazardous materials, evaluation of transportation modes, customs, and dispatch and tracking operations. Prepares students to successfully pass the Certified Logistics Associate assessment and the Certified Logistics Technician assessment that would allow Certified Logistics Associate (CLA) and a Certified Logistics Technician (CLT) recognition by the Manufacturing Skill Standards Council (MSSC). MSSC is a 501(c)3 non-profit, national, industry-led, training, assessment and certification organization. BSC-130 is the first course in the series of 5 BSC courses.

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
550

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Licensure/certifications

Credit for Prior College Level Learning (CPCLL) Details
Certified Logistics Associate and Certified Logistics Technician

Certified Logistics Associate (CLA) and Certified Logistics Technician (CLT) by the Manufacturing Skill Standards Council (MSSC) must be current. Department faculty will verify certifications. Verified CLA and CLT certifications, and the CLA and CLT CPCLL application, will be copied, signed, dated, and retained in the School Office.

Goals, Topics, and Objectives

Course Goals

- To help students and trainees develop the knowledge necessary to become a front-line worker and beyond in the field of supply chain logistics.
- To help students prepare for Certified Logistics Associate (CLA) and Certified Logistics Technician (CLT) national certifications, recognized by the Manufactures Skill Standards Council (MSSC).
- To addresses work activities and related skills involved with moving material though out the supply chain: to and from production sites, warehouses, distribution centers and within the various transportation modes (truck, air, rail, water and pipeline).

Core Course Topics

1. Global Supply Chain Logistics
2. The Logistics Environment
3. Material Handling Equipment
4. Safety Principles
5. Safety Material Handling & Equipment Operation
6. Quality Control Principles
7. Work Communication
8. Teamwork & Good Workplace Conduct to Solve Problems
9. Information Systems and 4.0 Technologies
10. Product Receiving
11. Product Storage
12. Order Processing
13. Packaging and Shipment
14. Inventory Control
15. Safe Handling of Hazardous Materials
16. Evaluation of Transportation Modes
17. Dispatch and Tracking Operations
18. Measurement Conversion*

Describe principal elements of the global supply chain logistics life cycle, the roles and responsibilities of the front-line worker, and the five modes of transportation.

Identify and list the major security requirements, the improved international logistics security, and how logistics activities impact the environment.

List and describe examples of manually operated equipment, lift trucks, and loading docks.

Describe the functions and types of conveyors, and automated systems.

Identify the principle federal safety organizations and their functional requirements.

Explain the characteristics of a safe, clean, and orderly work environment.

List emergency safety procedures, safety markings, and types of fire extinguishers.

List and identify the basic safety handling practices, functionality and use of personal protective equipment, and equipment safety features.

Identify and characterize key quality control systems, and provide examples of how front-line workers support these systems.

Explain quality audits, and present quality improvement recommendations to supervisors.

Explain methods of effective communication between shifts, with both internal and external customers, and through speaking, writing, reading and listening skills.

Describe a high-performance team and an effective team leader.

Explain ways to set team goals and how to resolve conflict.

Describe typical requirements for good workplace conduct.

Identify commonly used computer systems and software applications that capture logistical information.

Explain the uses of software systems by front-line workers. *Identify the key 4.0 technologies impacting warehouse operations

Describe activities essential to receiving, unloading, and checking.

List and describe standard documents for receipt of material.

Describe the procedures for identifying and reporting overages, shortages, or damages.

List key issues affecting how materials are stored, types of storage, and other methods of storage and retrieval.

Describe order cycle and procurement processes.

Explain pick ticket inspection, how audits are conductive, the staging of material, and steps involved in developing a packing manifest.

Identify the process for selecting appropriate packing material and packaging tools best suited for handling and packaging products.

Describe the process to ensure that outbound counts are accurate and steps to verify that the right package is securely loaded into the right trail.

Describe fundamentals of inventory control.

List and explain the most common inventory control systems and methods for accurate inventory counting.

Describe methods for capturing logistics information.

List government regulations related to hazardous material.

Identify safe working practices for unloading and loading hazardous material.

List other safe work practices for transfer and storage of hazardous material.

Describe each mode of transportation (Truck, Air, Rail, Water, Pipeline) and its advantages and disadvantages.

List the main considerations in determining the best mode of transportation and examples of transportation documentation.

Explain shipping documentation.

Describe the main factors related to vehicle routing, tracking cargo, and basic customs terminology.

Calculate basic weight and volume.

Convert U.S. measurements to metric and metric to U.S. measurements.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
As a part of this class, students will complete: Manufacturing Skill Standards Council certification exams for Certified Logistics Technician (CLT)

General Course Requirements and Recommendations
Access to the internet on a computer.

Grading Scale

LETTER GRADE	PERCENTAGE
A	93-100%
A-	90-92.9%
B+	87% - 89.9%
B	83% - 86.9%
B-	80% - 82.9%
C+	77% - 79.9%
C	73% - 76.9%
C-	70% - 72.9%
D+	67% - 69.9%
D	63% - 66.9%
D-	60% - 62.9%
E	<60%

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for BSC 130

BSC230 - Logistics and Distribution Strategy

Overview

Subject
Supply Chain Management

Academic Department
Business & Economics

School
Business, Entrepreneurshp, PD

Course Description
Focuses on the complexities of logistics and transportation in the field of Supply Chain Management (SCM). Covers the critical link of transportation in SCM, various modes of transportation (air, water, rail, pipeline, road), global transportation planning, execution, and management. Upon successful completion of this course, students should be able demonstrate competency in the following logistical areas: importance of logistics in SCM, information management systems, demand and order management, customer service, inventory control, facility location, warehouse management, packing and materials handling, transportation modes, transportation management, and international logics.

Course Pre-requisite(s)
BSC130 Tech Foundation SCM with grade of C or better or Instructor Permission

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
75

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
Assessment tool on file with department.

Goals, Topics, and Objectives

Course Goals
To provide a framework and foundation for the role of transportation from a micro and macro perspective in supply chain management. This course discusses and evaluates the theoretical and managerial dimensions of transportation in supply chains, including regulations and public policy. Focus on each of the five modes of transportation emphasizing their operating and service characteristics, cost structure and current challenges. Strategic activities and challenges involved in the movement of goods through the supply chain will be reviewed and evaluated.

Core Course Topics

1. Transportation and Its Role in the Supply Chain
2. Transportation Regulation
3. Costing and Pricing Policies
4. Motor Carriers
5. Railroads
6. Airlines
7. Water Transportation
8. Pipeline
9. Risk Management
10. Global Transportation Planning
11. Third Party Logistics (3PL)

Describe the changing forces in logistics and transportation and the changing global economy.

Recognize the the role of transportation in the movement of goods and services.

Explain the development of supply chain management and the importance of transportation to the supply chain.

Identify the historical and economic significance of transportation and its social, political, and environmental trends.

Recognize the role of Federal, State and Local agency regulations in the transportation industry.

List transportation safety and security regulations.

Explain the relationship between a rate and a price.

Describe the strategic role of pricing for transportation firms.

Describe the advantages and disadvantages of the motor carrier industry.

Identify the operating and service characteristics in the motor carrier industry.

Discuss the the nature of costs in the motor carrier industry.

Describe the advantages and disadvantages of the railroad industry.

Identify the operating and service characteristics in the railroad industry.

Discuss the the nature of costs in the railroad industry.
Describe the advantages and disadvantages of the airline industry.
Identify the operating and service characteristics in the airline industry.
Discuss the the nature of costs in the airline industry.
Describe the advantages and disadvantages of the water transportation industry.
Identify the operating and service characteristics in the water transportation industry.
Discuss the the nature of costs in the water transportation industry.
Describe the advantages and disadvantages of the pipeline industry.
Identify the operating and service characteristics in the pipeline industry.
Discuss the the nature of costs in the pipeline industry.
Discuss the nature of transportation risk.
Indicate the primary categories and types of transportation risk.
Recognize key transportation security regulations and initiatives.
Recognize the importance of proper global transportation planning.
Explain the role of International Commercial Terms (INCOTERM) in determining transportation responsibilities.
Describe payment term options.
Identify global freight documentation.
Identify the different types of third-party logistics service providers.
Discuss reasons why companies seek to integrate third-party logistic services.
Summarize the process for outsourcing transportation and logistic activities.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
All assessment of student achievement is left to the discretion of the individual instructor.

Grading Scale

LETTER GRADE	PERCENTAGE
A	93-100%
A-	90-92.9%
B+	87% - 89.9%
B	83% - 86.9%
B-	80% - 82.9%
C+	77% - 79.9%
C	73% - 76.9%
C-	70% - 72.9%
D+	67% - 69.9%
D	63% - 66.9%
D-	60% - 62.9%
E	<60%

Texts
Required course materials on file in department office.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for BSC 230

BSC240 - Operations and Supply Chain Management

Overview

Subject
Supply Chain Management

Academic Department
Business & Economics

School
Business, Entrepreneurshp, PD

Course Description
Explores the essential principles of Operations Management in Supply Chain Management (SCM). Emphasizes designing, planning, sourcing, processing, and distributing goods and services in SCM. Upon successful completion of this course, students should be able to demonstrate competency in the following SCM areas: operations and supply chain management, supply chain strategy and design, global supply chain procurement, demand forecasting methods, inventory management, scheduling and production design, lean systems, quality management, and project management.

Course Pre-requisite(s)
BSC130 Tech Foundation SCM with grade of C or better or Instructor Permission

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
Assessment tool on file with department.

Goals, Topics, and Objectives

Course Goals
To provide a framework and foundation for the role of operations management within an organization and across firms that make up the supply chain. This course discusses and evaluates the theoretical and managerial dimensions of operations management which include the design, supply, production, and delivery of goods and services to customers. The course focuses on organizing the firm's manufacturing capacity and service processes, monitoring quality, inventories and lean systems.

Core Course Topics

1. Managing Operations Across the Supply Curve
2. Global Procurement and Distribution
3. Sales and Operations Planning
4. Forecasting Demand
5. Inventory Management
6. Capacity and Facilities Design
7. Resource Planning
8. Lean Systems
9. Quality

Explain operations management.

Describe the basic roles and processes in operations management.
Define the planning activities associated with managing operations across the supply chain.

Discuss outsourcing as a strategic decision.

Explain the basic elements of procurement and spend analysis

Address the advantages and disadvantages of different modes of transportation.

Explain the interface of marketing and finance with sales and operation planning.

Describe sales and operations processes and the various tools and techniques to adjust capacity and manage demand.

Explain the strategic role of forecasting in supply chain management.

Describe the forecasting processes, and identify the components of forecasting demand.

Calculate demand based on various time-series models.

Discuss the key elements and costs of inventory and the relationship between inventory costs and customer service.

Utilize basic inventory models to calculate order quantity and related measures.

Determine appropriate reorder point and calculate quantity based on periodic inventory review.

Explain different strategies for capacity design based on economies of scale and the best operating level.

Describe the advantages and disadvantages of different types of layouts in both manufacturing and service setting.

Describe Material Requirements Planning (MRP) systems, and explain the the MRP process.

Determine resource capacity and load percent.

Describe basic Enterprise Resource Planning (ERP) systems and their scope of implementation.

Explain how the basic elements of lean eliminate waste, create flow, and continuously improve operations.

Explain how the concepts of lean and six sigma work together to achieve process improvement.

Create strategies for implementing lean in service industries.

Define the dimensions of quality, and explain the benefits and costs of good quality and the costs of poor quality.

Utilize quality tools and the Define, Measure, Analyze, Improve and Control (DMAIC) methodology in problem solving.

Recognize quality awards and International Organization for Standardization (ISO) certifications.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
All assessment of student achievement is left to the discretion of the individual instructor.

Grading Scale

LETTER GRADE	PERCENTAGE
A	93-100%
A-	90-92.9%
B+	87% - 89.9%
B	83% - 86.9%
B-	80% - 82.9%
C+	77% - 79.9%
C	73% - 76.9%
C-	70% - 72.9%
D+	67% - 69.9%
D	63% - 66.9%
D-	60% - 62.9%
E	<60%

Texts
Required course materials on file in department office.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for BSC 240

BSC250 - Purchasing and Supply Chain Management

Overview

Subject
Supply Chain Management

Academic Department
Business & Economics

School
Business, Entrepreneurshp, PD

Course Description
Introduces the critical function in Supply Chain Management (SCM) known as purchasing. Covers purchasing decisions, strategies, procedures, supplier selections, and negotiations. Upon successful completion of this course, students should be able to demonstrate competency in the following areas of SCM: purchasing strategies, legal aspects of purchasing, material management, just-in-time (lean) purchasing, procurement, strategic outsourcing, global sourcing, total quality management, cost and price determination, and bargaining and negotiations.

Course Pre-requisite(s)
BSC230 Logistics & Distribution Strat with a C grade or better AND BSC240 Operations & Supply Chain Mgmt with a C grade or better OR Instructor Permission.

Course Co-requisite(s)
BSC260 Global Logistics Supply Chain

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
Assessment tool on file with department.

Goals, Topics, and Objectives

Course Goals
To understand the integration and applications of purchasing within the supply chain. In today's global economy, students must possess analytical, technical, and negotiation skills in order to manage the transformation of raw materials and components into finished goods. Course topics included purchasing strategies and procedures, selection of suppliers, outsourcing, negotiation strategies, pricing and cost analysis.

Core Course Topics
1. Purchasing and the Supply Chain
2. Legal Aspects of Purchasing
3. Materials Management
4. Inventory Management
5. Lean Purchasing
6. Purchasing Procedures
7. Supplier Selection and Evaluation
8. Outsourcing
9. Global Sourcing
10. Supply Chain Partnerships
11. Total Quality Management and Purchasing
12. Price Determination
13. Bargaining and Negotiations

Explain the role of purchasing in the supply chain.

Outline how purchasing contributes to the firm's profitability.

Identify the important elements of the strategic planning process.

Describe the purchasing manager's legal authority.

Explain how contracts and purchase orders are executed.

Discuss the importance of ethics in purchasing.

Identify the activities of material management.

Discuss the relationship between purchasing and material management.

Identify the primary reasons for holding inventory.

Describe the ABC analysis and the Economic Order Quantity (EOQ) model.

Explain the differences between fixed-order quantity and variable-order inventory systems.

Describe lean production systems, Just-In-Time (JIT) inventory, and Material Requirements Planning (MRP).

Discuss the relationship between JIT and purchasing.

Identify the critical JIT purchasing advantages and disadvantages.

Discuss the steps in the purchasing cycle.

Identify the main activities in a typical purchasing department.

Define routine versus non-routine purchasing and buying methods.

Identify the qualifications of a good supplier.

Describe the key elements of the make-versus-buy decision.

Explain appropriate supplier techniques.

Define outsourcing and list the advantages, and disadvantages of outsourcing.

Identify the hidden costs of outsourcing.

Explain the difference between core and noncore competencies.

Discuss the factors and variables of global sourcing.

Describe how total costs are determined.

Identify the quantitative and qualitative aspects of global souring.

Analyze global sourcing alternatives.

Describe the elements of supply chain partners.

Identify the benefits and risks of supplier partnerships.

Define the buyer-supplier factors to achieve a successful partnership.

Identify purchasing's function within an overall quality assurance program.

Define total quality management (TQM).

Discuss the advantages of Six Sigma implementation

Discuss the relationship between cost and price.

Explain various pricing methods.

Describe how price/cost analysis is used for the negotiation process.

Describe the differences between bargaining and negotiations.

Explain the six psychological factors that affect bargaining, and identify the elements of negotiations.

Discuss the implementation of a bargaining strategy.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
All assessment of student achievement is left to the discretion of the individual instructor.

Grading Scale

LETTER GRADE	PERCENTAGE
A	93-100%
A-	90-92.9%
B+	87% - 89.9%
B	83% - 86.9%
B-	80% - 82.9%
C+	77% - 79.9%
C	73% - 76.9%
C-	70% - 72.9%
D+	67% - 69.9%
D	63% - 66.9%
D-	60% - 62.9%
E	<60%

Texts
Required course materials on file in department office.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for BSC 250

BSC260 - Global Logistics & Supply Chain Mgmt

Overview

Subject
Supply Chain Management

Academic Department
Business & Economics

School
Business, Entrepreneurshp, PD

Course Description
This course is the Capstone of the Supply Chain Management (SCM) program. Upon successful completion of this course, students should be able to demonstrate knowledge in SCM in order to think critically and design SCM strategies necessary to support the firm's global strategic decisions. This course should prepare students for higher-level learning in the field of SCM with emphasis in the following areas: globalization and international trade, supply chain relationships, supply chain strategies, collaborative planning, procurement and ethical standards, information flows and technology, measuring and managing logistic performance, supply chain vulnerabilities, sustainable supply chain systems, reverse logistics, service supply chains, and emerging supply change designs.

Course Pre-requisite(s)
BSC230 Logistics & Distribution Strat with a C grade or better AND BSC240 Operations & Supply Chain Mgmt with a C grade or better OR Instructor Permission.

Course Co-requisite(s)
BSC250 Purchasing & Supply Chain Mgmt

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
Assessment tool on file with department, or the successful completion of a grade of "C or better" from Henry Ford College's course BBA-254 Logistics and Supply Chain Management.

Note: BSC260 Global Logistics Supply Chain Global Logistics and Supply Chain Management to replace prior course offering BBA-254 Logistics and Supply Chain Management.

Goals, Topics, and Objectives

Course Goals
This course is the Capstone of the Supply Chain Management (SCM) program. Upon successful completion of this course, students should be able to demonstrate knowledge in SCM in order to think critically and design SCM strategies necessary to support the firm's global strategic decisions. When completed, this course should prepare students for higher-level learning in the field of SCM.

Core Course Topics
1. Globalization and the Supply Chain
2. Supply Chain Relationships
3. Supply Chain Strategies
4. Collaborative Planning with Logistics Service Providers
5. Procurement and Ethical Standards
6. Information Flows and Technology
7. Measuring and Managing Logistic Performance
8. Supply Chain Vulnerabilities
9. Sustainable Supply Chain Systems
10. Reverse Logistics
11. Service Supply Chains
12. Emerging Supply Change Designs

Explain globalization; and assess the global impact on the supply chain caused by social, technical, cultural, and political forces.
Examine the roll of multinational companies and their role in global trade.
Explain outsourcing and the factors affecting outsourcing decisions.
Identify problems faced by outsourcing companies that can result in failure.
Examine the outsourcer-outsoucee relationship and the integration and collaboration in the global supply chain.
Discuss the evolution of manufacturing from craft production, to mass production, to lean production, and to mass customization.
Explain lean and agile logistics strategies.
Compare and contrast the similarities and differences between lean production and agile supply chains.
Describe and differentiate the various types of companies that provide logistics services.
Examine carrier responsibilities and documentation.
Identify factors that should be considered when selecting the logistics service provider.
Describe the differences between procurement, sourcing and purchasing.

Identify the motivations and differences between buyers and sellers.
Explain the value and risk factors of goods and services to a firm and the level of dependency relative to the product.
Discuss ethical behavior and concept of sustainability.
Define the role of information technology in the supply chain.
Explain the need for visibility and transparency across the supply chain network and outline the barriers to achieving it.
Describe various information technologies and the use of RFID in the supply chain to provide real-time information visibility.
Explain the basic forms of performance measurement.
Illustrate the trend towards measurement of a wider array of activities, and the driving forces behind this trend.
Describe the role of benchmarking, commonly used metrics, and key performance indicators.
Explain why supply chain risk, robustness, and resilience have emerged as important themes in supply chain management.
Discuss the need for a holistic approach to managing supply chain vulnerabilities.
Explain the terms carbon footprint, food miles, and reverse logistics.
Illustrate the best practices in the attempt to reduce environmental footprints.
Explain the basics of reverse logistics.
Describe the various recovery options in reverse logistics such as reuse, remanufacturing, and recycling.
Identify key success factors for the implementation of reverse logistic systems.
Highlight the increased importance of service supply chains in the global economy.
Define service, service science, and service supply chains.
Compare and contrast manufacturing and service supply chains.
Review the many logistics and supply chain strategies and practices employed today.
Discuss the need to synchronize the design of supply chains with the design of a product.
Outline the skills and knowledge areas required of logistics and supply chain managers in the future.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
All assessment of student achievement is left to the discretion of the individual instructor.

Grading Scale

LETTER GRADE	PERCENTAGE
A	93-100%
A-	90-92.9%
B+	87% - 89.9%
B	83% - 86.9%
B-	80% - 82.9%
C+	77% - 79.9%
C	73% - 76.9%
C-	70% - 72.9%
D+	67% - 69.9%
D	63% - 66.9%
D-	60% - 62.9%
E	<60%

Texts
Required course materials on file in department office.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for BSC 260

CHEM111 - Chem Skills Pre-Professional Programs

Overview

Subject
Chemistry

Academic Department
Chemistry

School
Science, Tech, Engr & Math

Course Description
Includes the study of dimensional analysis; atomic structure; stoichiometry; molarity; the periodic table; nomenclature; reactions and equations, and properties of gases. This course is for students majoring in science, engineering, mathematics, pharmacy, or other pre-professional programs who would benefit from further preparation for the standard general chemistry sequence required in these programs. May not be used to satisfy elective requirements for the AS in Chemistry program. Students in other programs should consult with their program advisor about eligibility for use as an elective. Three hours of lecture and two hours of laboratory per week.

Course Pre-requisite(s)
Eligible to take a gateway MATH course at HFC or a satisfactory score on the Math placement exam, and ENG131 Introduction College Writing eligible.

Credit Hours
4

Total Contact Hours
Total Instructor Contact Hours:
77

Total Student Contact Hours:
77

Course Fee
25

Academic Level
Undergraduate

General Education Category
Natural Sciences

Michigan Transfer Agreement (MTA) Category
Category 6: Natural Sciences - Applied Degrees, Category 6: Natural Sciences - Transfer Degrees - Lecture and Lab

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
A student may receive credit for CHEM111 Chem Skills Pre-Professional by earning either:

1. A minimum score of 50 on the CLEP Chemistry Exam
2. A score of 4 or higher on the AP Chemistry Exam
3. A score of 4 or higher on the International Baccalaureate-Higher Level (IB-HL) Chemistry Exam
4. A score of 5 or higher on the International Baccalaureate-Standard Level (IB-SL) Chemistry Exam

Goals, Topics, and Objectives

Core Course Topics

1. Calculations: exponential and scientific notation
2. Measurements: metric system, significant figures
3. Dimensional analysis: units conversions, problem solving, percentages
4. The nature of matter: phases, mixtures, compounds, and elements
5. Basic atomic theory: atoms, protons, neutrons, electrons, and ions
6. Periodic table: symbols, names, periods, groups, atomic weights
7. Nomenclature; naming compounds and writing formulas
8. Chemical equations: balancing, molecular, and ionic
9. Stoichiometry
10. Properties of gases
11. Introduction to safety in the chemistry laboratory

Use a calculator to evaluate mathematical expressions involving scientific notation

Solve problems using dimensional analysis (unit conversion)

Distinguish among elements, compounds (both ionic and covalent), and mixtures

Determine the structure of atoms and ions in terms of subatomic particles including electron configuration and orbitals.

Predict chemical and physical properties using the periodic table

Name chemicals from formulas for simple ionic and binary compounds and common acids. Common "ate" ion formulas should be committed to memory

Write formulas from names of chemicals for simple ionic and binary compounds and common acids. Common "ate" ion formulas should be committed to memory

Write and balance chemical equations, including molecular and ionic forms

Identify oxidation numbers, the substance oxidized, the substance reduced, the oxidizing agent, the reducing agent, product of oxidation and product of reduction.

Solve chemical problems using mole conversions

Solve stoichiometry problems (mole-mole, mole-mass and mass-mass problems) using dimensional analysis

Perform calculations involving common concentration units (mass per-cent and molarity)

Describe properties of ideal gases

Solve problems involving gas laws

Apply principles of safety rules and demonstrate knowledge of the location of common laboratory and safety equipment

Demonstrate proficiency in the use of chemical equipment

Analyze and interpret measurement data, using mathematical models, and/or observed chemical behavior, expressed in chemical equations, to draw conclusions regarding the nature of matter

Demonstrate cooperative learning skills

Demonstrate use of critical thinking skills in analyzing data, making connections and relating to chemical patterns

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Students will be assessed in lecture using exams, assignments/quizzes, and a comprehensive final. Students will be assessed in lab using reports, quizzes and lab-exams. The overall course grade is determined using the categories and values listed below.

CATEGORY	PERCENTAGE
Lecture Exams	40-50%
Laboratory (reports, quizzes, lab-exams)	25%
Assignments/Quizzes	up to 10%
Final Exam	25%

No student will receive a passing grade in CHEM111 Chem Skills Pre-Professional unless that student has earned at least a 55% in the laboratory.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for CHEM 111

CHEM131 - Principles of Chemistry

Overview

Subject
Chemistry

Academic Department
Chemistry

School
Science, Tech, Engr & Math

Course Description
Introduces general inorganic chemistry. Major topics include measurements, atomic structure, bonding, chemical periodicity, stoichiometry, gas laws, solution chemistry, nuclear chemistry, and acid/base chemistry. May meet requirements in Nursing and Health Careers programs. Three hours of lecture and two hours of laboratory per week.

Course Pre-requisite(s)
Eligible to take a gateway MATH course at HFC or a satisfactory score on the Math placement exam, and ENG131 Introduction College Writing eligible.

Credit Hours
4

Total Contact Hours
Total Instructor Contact Hours:
77

Total Student Contact Hours:
77

Course Fee
25

Academic Level
Undergraduate

General Education Category
Natural Sciences

Michigan Transfer Agreement (MTA) Category
Category 6: Natural Sciences - Applied Degrees, Category 6: Natural Sciences - Transfer Degrees - Lecture and Lab

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Portfolio Review, Other

Credit for Prior College Level Learning (CPCLL) Details
A student may receive credit for CHEM131 Principles of Chemistry by earning a score of 4 or higher on the AP Chemistry Exam and providing a portfolio that demonstrates 30 hours of appropriate college level chemistry laboratory experience. An interview may also be required.

A student may receive credit for CHEM131 Principles of Chemistry by earning either:

1. A score of 4 or higher on the AP Chemistry Exam and providing a portfolio that demonstrates 30hr of appropriate college level chemistry laboratory experience. An interview may also be required.
2. A score of 5 or higher on the International Baccalaureate-Higher Level (IB-HL) Chemistry Exam.
3. A score of 6 or higher on the International Baccalaureate-Standard Level (IB-SL) Chemistry Exam.

Goals, Topics, and Objectives

Course Goals
The purpose of this course is to illustrate through classroom instruction and laboratory experiments some of the fundamental principles and laws governing general chemistry. The curriculum is designed to provide a chemistry foundation that prepares students for further careers including Nursing and Health Careers programs and assist students develop problem solving and critical thinking skills.

Core Course Topics
1. Matter, Energy, and Measurements
2. Atoms, Atomic Structure, and the Periodic Table
3. Chemical Bonds and Nomenclature
4. Chemical Reactions and Stoichiometry
5. Properties of Gases and the Gas Laws
6. Solutions, Concentration Units, and Intermolecular Forces
7. Nuclear Chemistry
8. Acids, Bases, and pH

Associate the correct units with measurements of length, mass, volume, temperature, density, and heat.

Perform unit conversion and problem solving using the dimensional analysis method.

Identify the names of elements based on their elemental symbol.

Differentiate between elements, compounds, and mixtures.

Use the periodic table as a tool to explain and predict trends in atomic structure and properties.

Convert between the names and the chemical formulas of compounds and molecules.

Draw Lewis structure for atoms, molecules, and ions.

Determine the polarity of bonds.

Perform calculations using Avogadro's number.

Balance chemical equations.

Use stoichiometry to calculate mass relationships in a chemical reaction.

Use the Gas Laws to calculate how changes in pressure, temperature, and/or volume affect an ideal gas.

Relate the nature and importance of intermolecular forces to characteristic physical properties.

Distinguish between solutes and solvents.

Characterize a solution as saturated, unsaturated, or supersaturated.

Calculate the concentration of solutions.

Distinguish electrolytes from non electrolytes.

Define the properties of acids and bases.

Calculate pH and pOH of solutions.

Perform titration calculations.

Distinguish among alpha, beta, and gamma radiation and the appropriate shielding for each.

Calculate the amount of radioisotope remaining after a given number of half-lives.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Students will be assessed in lecture using exams, assignments, quizzes, and a comprehensive final. Students will be assessed in lab using reports, quizzes, and lab-exams. The overall course grade is determined using the categories and values listed below.

CATEGORY	PERCENTAGE
Lecture Exams (4)	40%
Laboratory (reports, quizzes, lab-exams)	25%
Assignments/Homework	10%
Quizzes	5%
Final Exam (cumulative)	20%

No student will receive a passing grade in CHEM131 Principles of Chemistry unless that student has earned at least a 65% in the laboratory.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for CHEM 131

CHEM132 - Principles Organic&Biological Chemistry

Overview

Subject
Chemistry

Academic Department
Chemistry

School
Science, Tech, Engr & Math

Course Description
This is the second course in a traditional two-semester General, Organic, and Biochemistry (GOB) sequence. Emphasizes nomenclature and functional group reactivity. Addresses the structure and function of lipids, carbohydrates, proteins, and nucleic acids at an introductory level. There are three hours of lecture and three hours of laboratory each week.

Course Pre-requisite(s)
CHEM131 Principles of Chemistry or CHEM141 Prin Gen & Inorgan Chem I or equivalent course, with a grade of C or better

Credit Hours
4

Total Contact Hours
Total Instructor Contact Hours:
92

Total Student Contact Hours:
92

Course Fee
25

Academic Level
Undergraduate

General Education Category
Natural Sciences

Michigan Transfer Agreement (MTA) Category
Category 6: Natural Sciences - Applied Degrees, Category 6: Natural Sciences - Transfer Degrees - Lecture and Lab

Goals, Topics, and Objectives

Core Course Topics

1. Organic Chemistry and the Diversity of Organic Compounds
2. Nomenclature; Structure; Physical Properties; and Reactions of the following organic compounds:
    - Hydrocarbons (alkanes, alkenes, alkynes and arenes)
    - Alcohols, Ethers and Thiols
    - Amines
    - Aldehydes and Ketones
    - Carboxylic Acids, Esters and Amides
3. Chirality
4. Structure; Function; and Reactions of the following biological molecules:
    - Lipids
    - Carbohydrates
    - Proteins
    - Nucleic Acids

Write the molecular and structural formulas of organic compounds.

Name and identify physical properties and characteristic reactions of hydrocarbons.

Identify and name organic molecules containing functional groups.

Identify physical properties of molecules containing functional groups.

Identify the following characteristic reactions involving functional groups: acid/base, oxidation/reduction, hydration/dehydration, condensation/hydrolysis

Describe the concept of chirality and the importance of stereoisomers.

Recognize and specify the configuration of a stereocenter using the R,S System.

Identify physical properties, reactions and functions of the following biological molecules: lipids, carbohydrates, proteins, nucleic acids

Describe membrane structure and transport.

Combine amino acids to form proteins and describe the levels of protein structure.

Identify factors that affect protein stability.

Describe the structures of DNA and RNA.

Describe the processes of replication, transcription and translation.

Demonstrate proficiency with the use of the following equipment: semi-microscale and traditional glassware, melting point apparatus, Bunsen burners, water aspirators, hot plate/stirrers

Demonstrate proficiency with the following techniques: distillation, recrystallization, graphical analysis, melting point and boiling point determinations, filtration, chemical waste disposal

Demonstrate the ability to predict physical properties and reactions between molecules based on an understanding of functional groups chemistry.

Demonstrate the use of critical thinking skills in the analysis of experimental data.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Students will be assessed in lecture using exams, assignments/quizzes, and a comprehensive final. Students will be assessed in lab using reports, quizzes and lab-exams. The overall course grade is determined using the categories and values listed below. CategoryPercentageLecture Exams40-50%Laboratory (reports, quizzes, lab-exams)25%Assignments/Quizzes/Homeworkup to 10%Final Exam (cumulative)25% No student will receive a passing grade in CHEM 132 unless that student has earned at least a 65% in the laboratory.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for CHEM 132

CHEM141 - Principles Gen & Inorganic Chemistry I

Overview

Subject
Chemistry

Academic Department
Chemistry

School
Science, Tech, Engr & Math

Course Description
Includes the study of atomic structure, stoichiometry, molarity, enthalpy, chemical periodicity, bonding and structure, reactions and equations, and properties of gases. This course is for students majoring in science, engineering, mathematics, pharmacy, or other pre-professional programs. Three hours of lecture and four hours of laboratory per week.

Course Pre-requisite(s)
ENG131 Introduction College Writing eligible AND (College preparatory-level high school chemistry with an average grade of B or better OR CHEM111 Chem Skills Pre-Professional with grade of C or better) AND (eligible to take a gateway MATH course at HFC OR a satisfactory score on the Math placement exam).

Credit Hours

5

Total Contact Hours

Total Instructor Contact Hours:
107

Total Student Contact Hours:
107

Course Fee
25

Academic Level
Undergraduate

General Education Category
Natural Sciences

Michigan Transfer Agreement (MTA) Category
Category 6: Natural Sciences - Applied Degrees, Category 6: Natural Sciences - Transfer Degrees - Lecture and Lab

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Portfolio Review, Other

Credit for Prior College Level Learning (CPCLL) Details
A student may receive credit for CHEM141 Prin Gen & Inorgan Chem I by earning a score of 4 or higher on the AP Chemistry Exam and providing a portfolio that demonstrates 60hr of appropriate college level chemistry laboratory experience. An interview may also be required.

A student may receive credit for CHEM141 Prin Gen & Inorgan Chem I by earning either:

1. A score of 4 or higher on the AP Chemistry Exam and providing a portfolio that demonstrates 60hr of appropriate college level chemistry laboratory experience. An interview may also be required.
2. A score of 6 or higher on the International Baccalaureate-Higher Level (IB-HL) Chemistry Exam.

Goals, Topics, and Objectives

Course Goals
This course is designed to prepare students for further courses in chemistry or to satisfy the requirement for a first semester course in chemistry for other fields of science. In addition to acquainting the student with the basic principles of chemistry, the course objective for CHEM141 Prin Gen & Inorgan Chem I is to assist the student in developing critical thinking and problem solving skills.

Core Course Topics

1. The classification of matter: phases, mixtures, compounds, and elements
2. Measurements: metric system, significant figures
3. Dimensional analysis: unit conversions, problem solving, percentages
4. Basic atomic theory: atoms, protons, neutrons, electrons, and ions
5. Periodic table: symbols, names, periods, groups, atomic weights
6. Nomenclature: naming compounds and writing formulas
7. Chemical equations: balancing; molecular, ionic, and oxidation-reduction
8. Mole conversions: Avogadro's number, molecular weights
9. Stoichiometry: including limiting reactant
10. Empirical formulas: from per cent composition and experimental data
11. Solutions: molarity, dilutions, solution stoichiometry, titrations
12. Gases: gas laws, gas stoichiometry, kinetic molecular theory, real gases
13. Thermochemistry: calorimetry, Hess' Law, enthalpies of formation, First Law of thermodynamics, heat and work, (optional: warming/cooling curves)
14. Electromagnetic radiation: wavelength, frequency, photon energies, photoelectric effect
15. Atomic Hydrogen: Bohr theory, wavefunctions, quantum numbers
16. Electron configurations: ground state atoms and ions
17. Periodic properties: atomic size, ionization energies, electron affinities, electronegativity
18. Chemical bonding: ionic, covalent, orbital overlap, bond lengths, bond energies
19. Lewis Dot Diagrams: resonance, molecular shapes and polarities
20. Valence Bond Theory: hybridization, double and triple bonds
21. Safety and related environmental concerns in the chemistry laboratory
22. (Molecular Orbital Theory: optional)

Write and balance chemical equations, including molecular, ionic, and redox.

Name chemicals from formulas.

Write formulas from names of chemicals.

Distinguish among elements, compounds, and mixtures.

Describe the structure of atoms and ions in terms of subatomic particles.

Predict chemical and physical properties using the periodic table.

Solve problems using dimensional analysis (unit conversion).

Solve chemical problems using mole conversions.

Solve chemical problems using concentrations.

Differentiate the various electromagnetic radiations and their interaction with matter.

Use quantum theory to describe the hydrogen atom.

Write ground state electron configurations for atoms and ions.

Relate electron configurations to various periodic properties.

Relate thermochemical properties to heat changes in chemical processes.

Draw Lewis Dot structures.

Use Lewis Dot structures to predict molecular geometry and properties.

Solve gas law problems.

Relate kinetic molecular theory to the states of matter.

Display professional behavior, courtesy, and attitude.

Observe, analyze, and interpret laboratory data, collected from experiments built on core course topics, both qualitatively and quantitatively.

Demonstrate proficiency in laboratory techniques used in various experiments.

Demonstrate critical thinking skills in identification of laboratory unknowns.

Practice appropriate safety procedures in the laboratory.

Use environmentally sound chemical laboratory practices.

Prepare neatly and accurately written lab reports using calculations, graphs,explanations, and chemical equations.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Students will be assessed in lecture using exams, assignments/quizzes/homework, and a comprehensive final. Students will be assessed in lab using reports, quizzes, and lab-tests. The overall course grade is determined using the categories and values listed below.

CATEGORY	PERCENTAGE
Lecture Exams	40-50%
Laboratory (reports, quizzes, lab-tests)	25%
Paper or presentation or homework	up to 10%
Final Exam (cumulative)	25%

No student will receive a passing grade in CHEM141 Prin Gen & Inorgan Chem I unless that student has earned at least a 55% in the laboratory.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for CHEM 141

CHEM142 - Principles Gen & Inorganic Chemistry II

Overview

Subject
Chemistry

Academic Department
Chemistry

School
Science, Tech, Engr & Math

Course Description
Emphasizes properties of liquids and solutions, reaction rates, chemical equilibria, thermodynamics, electrochemistry, acid/base chemistry, nuclear chemistry and descriptive chemistry of the more common elements (as time allows). Three hours of lecture and four hours of laboratory per week.

Course Pre-requisite(s)
CHEM141 Prin Gen & Inorgan Chem I with a grade of C or better. MATH175 Precalculus recommended.

Credit Hours
5

Total Contact Hours
Total Instructor Contact Hours:
107

Total Student Contact Hours:
107

Course Fee
27

Academic Level
Undergraduate

General Education Category
Natural Sciences

Michigan Transfer Agreement (MTA) Category
Category 6: Natural Sciences - Applied Degrees, Category 6: Natural Sciences - Transfer Degrees - Lecture and Lab

Goals, Topics, and Objectives

Course Goals
This course is designed to prepare students for further courses in chemistry or to satisfy the requirement in other fields of science for a two semester sequence in general chemistry. In addition to extending the student's knowledge of the basic principles of chemistry, the course objective for CHEM142 Prin Gen & Inorgan Chem II is to assist the student in developing critical thinking and problem solving skills.

Core Course Topics
1. The condensed phases
    - Liquids, solids, intermolecular forces, vapor pressure and other physical properties, phase diagrams
2. Properties of solutions
    - Solubility, concentration units, colligative properties
3. Chemical kinetics
    - Rate laws, integrated forms of the rate laws, mechanisms
4. Chemical equilibria: definitions, LeChatelier's Principle, equilibrium constants
5. Acid/Base equilibria: acids, bases, buffers, pH, titrations, hydrolysis of salts
6. Equilibria involving solids and complexes
    - Precipitate formation, selective precipitation, precipitation from complex ions, dissolving precipitates in favor of complex ions, naming complex ions
7. Chemical thermodynamics
    - Laws of thermodynamics, heat, work, enthalpy, entropy, free energy, spontaneity, and equilibrium constants
8. Electrochemistry
    - Voltaic and electrolytic cells, standard reduction potentials, Nernst Equation, Faraday's laws, relationship to free energy and equilibrium constants
9. Nuclear chemistry
    - Types of nuclear decay, stability of nuclei, writing nuclear equations, occurrences of natural and man-made radiation in the environment, disposal of nuclear waste and other contemporary issues related to use of radionuclides, kinetics and thermodynamic calculations associated with nuclear systems
10. Safety and related environmental concerns in the chemistry laboratory

Identify the intermolecular forces in the condensed phases of pure substances.

Predict the physical properties of pure substances using intermolecular forces.

Solve vapor pressure problems for pure materials.

Use cooling/warming curves to calculate heat changes for pure materials.

Calculate various concentration units for solutions.

Solve problems involving colligative properties of solutions.

Describe and explain the factors affecting reaction rates.

Determine the rate law for a reaction from experimental data.

Solve problems utilizing the integrated form of the rate law.

Evaluate a proposed mechanism for a reaction in light of experimental data.

Solve chemical equilibria problems in the gas phase and in solution with special emphasis on acid-base chemistry.

Describe how to construct buffers by the two common laboratory methods.

Solve buffer problems utilizing the Henderson-Hasselbalch equation.

Identify, interpret, and construct titration curves from experimental data for the four most encountered systems.

Calculate the pH at any point on a titration curve.

Solve chemical equilibria problems for systems involving solids and complex ions.

Write names and formulas for complex ions.

Describe mathematically and verbally the laws of thermodynamics.

Solve problems involving thermodynamic quantities.

Use Standard Reduction Potentials to differentiate voltaic and electrolytic cells.

Apply the Nernst Equation to voltaic cell systems.

Apply Faraday's laws to electrochemical systems.

Apply standard thermodynamic and electrochemical data to equilibrium systems.

Differentiate the various types of nuclear decays, their interactions with matter and their impact upon the environment.

Write nuclear reactions.

Solve problems based on nuclear equations.

Display professional behavior, courtesy, and attitude in both lecture and laboratory environments.

Observe, analyze, and interpret laboratory data, collected from experiments/exercises built on the core course topics, both qualitatively and quantitatively.

Demonstrate proficiency in laboratory techniques used in various experiments.

Demonstrate critical thinking skills in identification of unknowns.

Practice appropriate safety procedures in the laboratory.

Use environmentally sound chemistry laboratory practices.

Prepare neatly and accurately written lab reports using calculations, graphs, explanations, and chemical equations.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Students will be assessed in lecture using exams, assignments/quizzes/homework, and a comprehensive final. Students will be assessed in lab using reports, quizzes, and lab-tests. The overall course grade is determined using the categories and values listed below.

CATEGORY	PERCENTAGE
Lecture Exams	40-50%
Laboratory (reports, quizzes, lab-tests)	25%
Paper or presentation or homework	up to 10%
Final Exam (cumulative)	25%

No student will receive a passing grade in CHEM142 Prin Gen & Inorgan Chem II unless that student has earned at least a 55% in the laboratory.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for CHEM 142

CHEM241 - Organic Chemistry I

Overview

Subject
Chemistry

Academic Department
Chemistry

School
Science, Tech, Engr & Math

Course Description
Introduces organic chemistry. Emphasizes structural theory, stereochemistry, physical properties, reaction mechanisms, and functional group chemistry. This course covers the first semester of a full year course. It is a lecture course designed to meet the requirements for science majors, pre-professional biology, pre-professional chemistry, as well as premedical, pre-dental, pre-pharmacy, pre-veterinary, and chemical engineering students. Students should check requirements for organic chemistry at their intended transfer institution. Four hours of lecture per week without lab.

Course Pre-requisite(s)
CHEM141 Prin Gen & Inorgan Chem I with a grade of C or better

Credit Hours
4

Total Contact Hours
Total Instructor Contact Hours:
62

Total Student Contact Hours:
62

Course Fee
15

Academic Level
Undergraduate

General Education Category
Natural Sciences

Michigan Transfer Agreement (MTA) Category
Category 6: Natural Sciences - Applied Degrees, Category 6: Natural Sciences - Transfer Degrees - Lecture Only

Goals, Topics, and Objectives

Course Goals
After completing Chemistry 241, students should:

1. Be further acquainted with how organic chemistry impacts their lives on a daily basis.
2. Be able to understand the basic mechanisms by which alkanes, alkenes, alkynes, alkyl halides, ethers, thiols, and alcohols react.
3. Be able to name basic organic molecules, molecules containing functional groups, as well as cyclic and bicyclic compounds.
4. Be able to predict physical properties of organic molecules.
5. Be able to predict the results of some chemical reactions.
6. Be able to propose a synthesis of some basic organic molecules.
7. Be experienced in using critical thinking and the scientific method.
8. Be more familiar with the work of organic chemists.
9. Be prepared to enroll in higher level classes in chemistry.
10. Find greater appreciation for the complexity and beauty of the interrelationship between organic chemistry and biology.

Core Course Topics

1. Chemistry is the study of stuff (matter)
2. Organic Chemistry and the diversity of Organic Compounds
3. Drawing Organic Compounds
4. Predicting acid-base equilibrium by using pKa's
5. Chirality ("Handedness") in Organic Chemistry
6. Nomenclature; Structure; Physical and Chemical Properties of:

   Alkanes, Cycloalkanes, Alkenes, Alkynes, Alkyl Halides, and Alcohols
7. Thorough study of the following reaction mechanisms:
   - Addition reactions to alkenes: H-X, (hydrohalogenation, with possible rearrangements); H2O (hydration via: acid catalyzed oxymercuratio/demercuration; hydroboration/oxidation); X-X (halogenation); H2O (vicinal halohydrin formation)
   - Oxidation of alkenes (dihydroxylation, ozonolysis)
   - Reduction of alkenes (transition metal catalyzed hydrogenation)
   - Alkyne Reactions: Formation of Alkynes by halogenation/double elimination; Reduction of alkynes by Na in NH3; HgSO4/ H2SO4 catalyzed addition of water (including tautomerization); Hydroboration of Alkynes (including tautomerization); Addition of X2; Addition of HX; Addition of carboxylic acids
   - Radical halogenation of alkanes, allylic halogenation, and benzylic halogenation
   - Reactions of alkyl halides and sulfonates: SN1; SN2; E1; E2; Neighboring Group Participation, and Rearrangement
   - Reactions of alcohols: Reaction with H-X; Dehydration Reaction with SOCl2 and PBr3; Conversion to alkyl sulfonates; Oxidation using Chromic acid (including Chromate ester formation); Pinacol Rearrangement; Oxidation with NADP+
   - Reactions with ethers: Lysis using H-X; Hydrolysis; Nucleophilic opening of epoxides
   - Reactions forming ethers: Condensation of alcohols; Williamson Ether Synthesis; Sharpless Asymmetric Epoxidation
   - Reactions of alkenes with alcohols

Demonstrate various levels of proficiency with predicting the mechanisms of reactions of various classes of organic molecules including, but not limited to alkanes, alkenes, alkyl halides, and alcohols. 2, Demonstrate the use of critical thinking skills in the analysis of chemical reactions.

Recognize and give examples of the importance of searching for patterns when one is studying the sciences and carrying out investigations and/or experiments.

Name organic and biochemical molecules possessing a variety of structural complexity.

Predict the physical properties of molecules based on an understanding of functional groups.

Predict reactions between molecules base on an understanding of functional groups and bonding.

Describe how chemical properties and reactions mediate biological processes such as: i. How solubility mediates where drugs and other chemicals go in the human body; ii. The role of pH in maintaining enzyme activity. iii.The importance of buffers in maintaining the appropriate pH; iv. How isomerism can change a molecule's bioavailability/reactivity; vi. Demonstrate proficiency in performing retrosynthetic analysis; vii. Demonstrate proficiency with course management software such HFC Online. viii. Display professional behavior, courtesy, and attitude

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Student assessment is built into the course objectives. Objectives were written using wording which allows their achievement to be measured. Students will be assessed on:

1. In Class Questions, both verbal and written.
2. Pre Class Questions, both written and electronic.
3. On-line Web Based Learning (OWL) provided by text publisher which allows students to complete homework type problems, receive immediate feedback, and allows them to redo the material until they get it right.
4. Lecture examinations consisting of objective questions and short essays.
5. Professional behavior and attitude.

Texts
Understanding Organic Chemistry I D. Todd Whitaker, PhD, Cengage Learning, USA, 2012

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for CHEM 241

CHEM242 - Organic Chemistry II

Overview

Subject
Chemistry

Academic Department
Chemistry

School
Science, Tech, Engr & Math

Course Description
Builds on the concepts introduced in CHEM-241. Emphasizes acid-base chemistry, spectroscopy, and retrosynthetic analysis. Reaction mechanisms and physical properties of the following functional groups will be explored: carbonyl chemistry (aldehydes, ketones, and carboxylic acid derivatives); carboxylic acids; amines; carbohydrates; lipids; amino acids, proteins; and nucleotides. This course is designed to meet the requirements for science majors, pre-professional biology, pre-professional chemistry, as well as premedical, pre-dental, pre-pharmacy, veterinary, and chemical engineering students. Four hours of lecture per week without lab.

Course Pre-requisite(s)
CHEM241 Organic Chemistry I with a grade of C or better.

Credit Hours
4

Total Contact Hours
Total Instructor Contact Hours:
62

Total Student Contact Hours:
62

Course Fee
15

Academic Level
Undergraduate

General Education Category
Natural Sciences

Michigan Transfer Agreement (MTA) Category
Category 6: Natural Sciences - Applied Degrees, Category 6: Natural Sciences - Transfer Degrees - Lecture Only

Goals, Topics, and Objectives

Course Goals

- After completing Chemistry 242, students should:
    - Be further acquainted with how organic chemistry impacts their lives on a daily basis.
    - Be able to understand the basic mechanisms by which alkenes, alkynes, ethers, aldehydes, ketones, carboxylic acids, carboxylic acid derivatives (acid halides, anhydrides, esters, amides, nitriles), other acid derivatives (sulfonamides, imides, phosphoric anhydrides, chromic anhydrides), amines, aromatics and other conjugated systems react.
    - Be experienced in using critical thinking and the scientific method.
    - Be more familiar with the work of organic chemists.
    - Be prepared to enroll in higher level classes in chemistry and biochemistry.
    - Find greater appreciation for the complexity and beauty of the interrelationship between organic chemistry and biology.

Core Course Topics

1. Continued application of many concepts mastered in CHEM241 Organic Chemistry I such as:

   Drawing Organic Compounds Predicting acid-base equilibria by using pKa's Chirality ("Handedness") in chemical reactions and interactions of biochemicals
2. Nomenclature; Structure; Physical and Chemical Properties of:

   Alkanes and Cycloalkanes Alkenes Alkyl halides Alcohols Ethers
3. Nomenclature; Structure; Physical and Chemical Properties of:

   ethers, aldehydes, ketones, carboxylic acids, carboxylic acid derivatives (acid halides, anhydrides, esters, amides, nitriles), other acid derivatives (sulfonamides, imides, phosphoric anhydrides, chromic anhydrides), amines, aromatics and other conjugated systems
4. Thorough study of the following reaction mechanisms:
    - Williamson ether synthesis; Acid-catalyzed addition of alcohols to alkenes (formation of ethers); Epoxidation of alkenes using RCO3H Halohydrin formation; Internal SN2 Acid-catalyzed opening of epoxides; Nucleophilic opening of epoxides
    - Grignard addition to aldehydes and ketones; Addition of terminal alkyne anions to aldehydes and ketones; Formation of a cyanohydrin; Phosphonium ylide formation / Wittig reaction; Acid catalyzed formation of hemiacetals and acetals; Reactions of 1,3-dithiane anions with electrophiles; Imine formation from aldehydes and ketones; Keto/Enol tautomerization. (i) Acid-catalyzed. (ii) Base-catalyzed; Acid-Catalyzed alpha-halogenation of a ketone; Base-Catalyzed alpha-halogenation of a ketone (Haloform reaction); NaBH4 reduction of aldehydes and ketones; Wolff-Kishner Reduction Fischer esterification; Formation of methyl esters using diazomethane (CH2N2)
    - Reaction of carboxylic acids with SOCI2; decarboxylation of beta-carbonyl containing carboxylic acids; Fischer Esterification
    - Nucleophilic acyl substitution; Acid-catalyzed hydrolysis of carboxylic acid derivatives; Base-catalyzed hydrolysis of carboxylic acid derivatives; Reactions of Carboxylic acid derivatives with alcohols; Reaction of acid halides with amines to give amides; Reactions of esters with Grignard reagents and organolithium reagents; Reduction of Carboxylic acid derivatives; The Hofmann rearrangement of primary amides
    - Base-catalyzed aldol reactions/Base-catalyzed dehydrations; Acid-catalyzed aldol reactions/Acid-catalyzed dehydrations; Claisen condensation; Dieckmann condensation; Formation of Isopentenyl pyrophosphate (precursor to cholesterol/ hormones/terpenes); Alkylation/Acylation of enamines; Acetoacetic/Malonic ester syntheses; Michael reaction: (Conjugate addition (1,4) of stabilized enolate anions);
    - Kolbe synthesis: carboxylation of phenol towards the pharmaceutical synthesis of aspirin; Benzylic Resonance Electrophilic aromatic substitution: Chlorination Formation of the nitronium ion/Sulfonation; Friedel-Crafts alkylation/Friedel-Crafts acylation and generation of acyl cation; Other Friedel-Crafts Reactions Formation of the nitrosyl cation (NO+)
    - Reactions of secondary amines with the nitrosyl cation to give N-nitrosamines; Reactions of primary amines with the nitrosyl cation to give diazonium ions; The Tiffeneau-Demjanov rearrangement; The Hofmann Elimination; The Cope elimination 1,2 and 1,4-addition to a conjugated diene.
    - The Claisen rearrangement.
    - Acid-catalyzed formation of glycosides (review acetal formation).
    - Formation of dimethylallyl cation/Reaction to geranyl pyrophosphate (time permitting); From Squalene to Lanosterol (time permitting); Oxidation of an alcohol by NAD+; Unsaturated fatty acids from saturated fatty acids using FAD oxidation; Claisen reactions in biochemistry; Reverse aldol reactions in biochemistry; The reactions in Glycolysis; The reactions in the citric acid cycle; The reactions in the biosynthesis of: fatty acids, terpenes, and steroids.

Demonstrate various levels of proficiency with predicting the mechanisms of reactions of various classes of organic molecules including, but not limited to ethers, aldehydes, ketones, carboxylic acids, carboxylic acid derivatives (acid halides, anhydrides, esters, amides, nitriles), other acid derivatives (sulfonamides, imides, phosphoric anhydrides and esters, chromic anhydrides), amines, aromatics and other conjugated systems.

Demonstrate the use of critical thinking skills in the analysis of chemical reactions.

Recognize and give examples of the importance of searching for patterns when one is studying the sciences and carrying out investigations and/or experiments.

Name complicated organic and biochemical molecules.

Devise a synthesis for relatively elaborate organic compounds (using retrosynthetic analysis).

Predict the physical properties of molecules based on an understanding of functional groups.

Predict reactions between molecules base on an understanding of functional groups and bonding.

Describe how chemical reactions mediate biological processes.

Demonstrate competence with identification of functional groups and organic reactions of biomolecules.

Determine the structure of organic species using spectroscopic data.

Demonstrate proficiency with course management software such as HFC Online.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Student assessment is built into the course objectives. Objectives were written using wording which allows their achievement to be measured. Students will be assessed on:

1. In Class Questions, both verbal and written.
2. Pre Class Questions, both written and electronic.
3. On-line Web Based Learning (OWL) provided by text publisher which allows students to complete homework type problems, receive immediate feedback, and allows them to redo the material until they get it right.
4. Lecture examinations consisting of objective questions and short essays.
5. Professional behavior and attitude.

Texts
Understanding Organic Chemistry I D. Todd Whitaker, PhD, Cengage Learning, USA, 2012

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for CHEM 242

CHEM243 - Microscale Organic Chemistry Lab I

Overview

Subject
Chemistry

Academic Department
Chemistry

School
Science, Tech, Engr & Math

Course Description
Microscale glassware and analytical techniques are used to study fundamental organic reactions and the synthesis of organic compounds. Techniques include distillation (simple, fractional, and steam), crystallization, and extraction. Analysis of compounds includes melting points, boiling points, refractive indices, infrared spectroscopy, and chromatography (gas, thin layer, column). Approximately one hour of lecture and three hours of laboratory per week. This meets the Organic Laboratory requirement necessary to enter into Pharmacy, Medical, Dental, and Veterinary schools. Many schools require students to also take Organic Lab II CHEM-244.

Course Pre-requisite(s)
CHEM141 Prin Gen & Inorgan Chem Ior the equivalent and CHEM241 Organic Chemistry I, with a grade of C or better

Course Co-requisite(s)
CHEM241 Organic Chemistry I can be a co-requisite with Instructor Permission

Credit Hours
2

Total Contact Hours
Total Instructor Contact Hours:
62

Total Student Contact Hours:
62

Course Fee
40

Academic Level
Undergraduate

General Education Category
Natural Sciences

Michigan Transfer Agreement (MTA) Category
Category 6: Natural Sciences - Applied Degrees, Category 6: Natural Sciences - Transfer Degrees - Lecture Only

Goals, Topics, and Objectives

Course Goals

- After completing Chemistry 243, students should:
  - Be skilled in the use of specialized instrumentation.
  - Be adept at making careful measurements and observations.
  - Be able to purify organic compounds.
  - Be able to keep an up-to-date laboratory notebook.
  - Be experienced in using critical thinking and the scientific method.
  - Be more familiar with the work of professional chemists.
  - Be able to use the chemical literature for research.
  - Be able to write detailed, accurate, and thorough scientific reports.
  - Be prepared to enroll in higher level classes in chemistry.

Core Course Topics

1. Lab Procedures and Safety
2. Using the Chemical Literature (primary and secondary references)
3. Proper Laboratory notebook preparation and maintenance
4. Measurement of Physical Properties: boiling point, melting point, and refractive index.
5. Distillation: Simple Distillation (semimicro); Fractional Semimicroscale Distillation (FSMD)
6. Solvent Extraction and Determining a Partition Coefficient; Solvent Extraction using Acid-Base Properties
7. Williamson Ether Synthesis
8. Esterification: Isoamyl Acetate Synthesis
9. Infrared Spectroscopy (students will learn how to independently operate a modern spectrophotometer)
10. Photochemical Isomerization of Alkenes: Isomerization of cis-1,2-Dibenzoylethylene
11. Thin Layer Chromatography (TLC)
12. Infrared unknowns
13. The Wittig reaction and the Horner-Wadsworth-Emmons-Arbuzov variation
14. Diels-Alder Reaction: Synthesis of 9,10-Dihydroanthracene-9,10-a,b-Succinic acid anhydride
15. Diazonium Coupling Reaction: Synthesis of Methyl Red
16. Friedel-Crafts Acylation of Ferrocene
17. Cost Analysis

    Scaleup a reaction from microscale to multi-tonne scale and perform a cost analysis.

Demonstrate various levels of proficiency with laboratory skills used by scientists. Each lab objective will be listed in the laboratory assignments. Each objective will be characterized as requiring familiarity, competence, or expertise on the part of the student. During the laboratory periods, the student will then be assessed to determine whether they have the level of proficiency expected.

Demonstrate the use of critical thinking skills in the analysis of experimental data.

Operate proficiently the following equipment: microscale, semi-microscale and traditional glassware, melting point apparatus, refractometers, infrared spectrophotometer, thin layer chromatographic plates, fume hoods, safety glasses, burners, hot plates, syringes, hazardous chemicals.

Employ proficiently the following techniques: microscale distillation; recrystalization; infrared sampling; melting point determination; boiling point determination; solvent evaporation; solvent extraction; delivery of microscale quantities; and hazardous waste disposal.

Recognize and give examples of the importance of searching for patterns when one is studying the sciences and carrying out investigations and/or experiments.

Describe and analyze reaction mechanisms and their relationship to experimental manipulation.

Demonstrate the ability to predict the physical properties of molecules based on an understanding of functional groups.

Show familiarity with traditional library resources and electronic media and use criteria with which to judge the reliability of various resources.

Perform a cost analysis using chemical catalogs for a large scale organic synthesis.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Student assessment is built into the course objectives. Objectives were written using wording which allows their achievement to be measured. Students will be assessed on:

1. Performance in the lab setting.
2. Laboratory reports.
3. Lab material and skills will be assessed on a lab practical midterm and final. These exams have both practical and theoretical portions. Both of these exams last 4 hours.
4. In Class Questions
5. Pre Class Questions, both written and electronic.

Texts
Text book is designed for use by students entering into health related careers such as Pharmacy, Medical, Dental, and Veterinary. One such book being Microscale Organic Laboratory, 4th Ed. Dana W. Mayo, Ronald M. Pike, Peter K. Trumper NewYork: John Wiley & Sons, Inc., 2000.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for CHEM 243

CHEM244 - Microscale Organic Chemistry Lab II

Overview

Subject
Chemistry

Academic Department
Chemistry

School
Science, Tech, Engr & Math

Course Description
Microscale glassware and analytical techniques are used in this follow-up course to CHEM-243. The primary focus of this course is multi-step organic syntheses and proper research techniques. Practical techniques from the previous course will be applied towards the synthesis of a novel polyaromatic hexaphenylbenzene, an antibacterial drug sufanilamide, triphenylmethanol, and cholesta-3,5-dien-3-ol acetate. Products will be analyzed (melting point/boiling point, infrared analysis, chromatographic properties (TLC, GC), solubility, refractive index) and compared to literature values to verify their veracity. Research will involve a critical analysis of competitive synthetic methods of a recent pharmaceutical agent. The sequence CHEM-241, CHEM-242 (Lecture I and II) and CHEM-243, CHEM-244 (Laboratory I and II) will transfer to all Michigan universities to meet their Organic Chemistry requirements for Science Majors. Approximately one hour of lecture and three hours of lab per week.

Course Pre-requisite(s)
CHEM243 Microscale Organic Chem Lab I and CHEM242 Organic Chemistry II, with a grade of C or better

Course Co-requisite(s)
CHEM242 Organic Chemistry II can be a co-requisite

Credit Hours
2

Total Contact Hours
Total Instructor Contact Hours:
62

Total Student Contact Hours:
62

Course Fee
45

Academic Level
Undergraduate

General Education Category
Natural Sciences

Michigan Transfer Agreement (MTA) Category
Category 6: Natural Sciences - Applied Degrees, Category 6: Natural Sciences - Transfer Degrees - Lecture Only

Goals, Topics, and Objectives

Course Goals
After completing Chemistry 244, students should be:

- Skilled in the use of specialized instrumentation.
- Adept at making careful measurements and observations.
- Able to purify organic compounds.
- Able to keep an up-to-date laboratory notebook.
- Experienced in using critical thinking and the scientific method.
- More familiar with the work of professional chemists.
- Able to use the chemical literature for research.
- Prepared to enroll in higher level classes in chemistry and biochemistry.

Core Course Topics

1. Lab Safety
2. Using the Chemical Literature (primary and secondary references)
3. Proper Laboratory notebook preparation and maintenance
4. Further exploration of Research Methods
5. Grignard Reaction With A Ketone: Triphenylmethanol
6. Hydroboration-Oxidation of an Alkene: Octanol
7. Multistep Organic Synthesis I:
    - The Benzoin Condensation of Benzaldehyde: Benzoin
    - Copper(II) Ion Oxidation of Benzoin: Benzil
    - Tetraphenylcyclopentanedienone
    - Acetylation of Aniline: 2,2,2-Trifluoroacetanilide
    - Synthesis of (E)-Stilbene using a Horner-Wadsworth-Emmons-Arbuzov protocol
    - Bromination of (E)-Stilbene: meso-Stilbene Dibromide
    - Dehydrohalogenation of meso-Stilbene Dibromide: Diphenylacetylene Hexaphenyl Benzene
8. Multistep Organic Synthesis II:
    - Chlorosulfonation of 2,2,2-Trifluoroacetanilide: p-(Trifluoroacetamido)benzenesulfonyl chloride
    - Preparation of Arene Sulfonamide: Sulfanilamide

Demonstrate various levels of proficiency with laboratory skills used by scientists. Each lab objective will be listed in the laboratory assignments. Each objective will be characterized as requiring familiarity, competence, or expertise on the part of the student. During the laboratory periods, the student will then be assessed to determine whether they have the level of proficiency expected.

Demonstrate the use of critical thinking skills in the analysis of experimental data.

Demonstrate proficiency with the use of the following equipment: microscale, semi-microscale and traditional glassware, melting point apparatus, refractometers, infrared spectrophotometer, thin layer chromatographic plates, fume hoods, safety glasses, burners, hot plates, syringes, rotary evaporator, and hazardous chemicals.

Demonstrate proficiency with the following techniques: microscale distillation, recrystalization, infrared sampling, melting point determination, boiling point determination, solvent evaporation, delivery of microscale quantities, and hazardous waste disposal.

Recognize and give examples of the importance of searching for patterns when one is studying the sciences and carrying out investigations and/or experiments

Describe and analyze reaction mechanisms and their relationship to experimental manipulation.

Predict the physical properties of molecules based on an understanding of functional groups.

Show familiarity with traditional library resources and electronic media and use criteria with which to discriminate the reliability of various resources.

Determine the identity of an unknown using formula analysis, NMR data, infrared data, density and refractive index.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Student assessment is built into the course objectives. Objectives were written using wording which allows their achievement to be measured. Students will be assessed on:

1. Laboratory reports.
2. Lab course material and skills will be assessed on a lab final. This exam will have both practical and theoretical portions. This exam last 4 hours.
3. In Class Questions
4. Pre Class Questions, both written and electronic.
5. A research project.

Texts
Text book is designed for use by students entering into health related careers such as Pharmacy, Medical, Dental, and Veterinary. One such book being; Microscale Organic Laboratory, 4th Ed. Dana W. Mayo, Ronald M. Pike, Peter K. Trumper NewYork: John Wiley & Sons, Inc., 2000.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for CHEM 244

CIMEL101 - Instruments

Overview

Subject
Electrical Engineering Technol

Academic Department
Adv Manufacturing/Fabrication

School
Business, Entrepreneurshp, PD

Course Description
Introduces electrical measurement instruments, including digital and analog multimeters, clamp-on ammeters, megohmeters, and the oscilloscope. Requires hands-on lab time spent with each device type. Emphasizes safe measuring techniques. Covers additional devices such as pressure gauges, chart recorders, heat sensors and chain stretch monitor.

Course Pre-requisite(s)
CIMEL-100 or Instructor Permission

Credit Hours
1

Total Contact Hours
Total Instructor Contact Hours:
23.5

Total Student Contact Hours:
23.5

Course Fee
20

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
Successful completion of AMTEC Course Module 1072 Post Assessment (85%) and instructor assessment of lab activities.

Goals, Topics, and Objectives

Core Course Topics
1. Multimeters
2. Clamp-on Ammeter
3. Megger
4. Oscilloscope
5. Miscellaneous Test Devices

Utilize a multimeter for voltage, current, and resistance readings.*

Utilize a amprobe ammeter to measure current.

Utilize a megohmmeter to measure insulation resistance.

Utilize an oscilloscope in DC and AC circuits.

Operate other test equipment.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
• AMTEC Modular Pre and Post exams
• Lab evaluation utilizing a standard evaluation matrix

Texts
AMTEC Module 1072 Digital Learning Materials

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for CIMEL 101

CIMEL102 - Control Circuits and Components

Overview

Subject
Electrical Engineering Technol

Academic Department
Adv Manufacturing/Fabrication

School
Business, Entrepreneurshp, PD

Course Description
Introduces control logic components and circuit function. Examines combinational and sequential ladder logic designs with attention to reliability of function. Involves construction of various circuits that demonstrate key component functionality concepts. Introduces troubleshooting using analytical techniques, multimeters, chart recorders, and oscilloscopes.

Course Pre-requisite(s)
CIMEL101 Instruments or Instructor Permission

Credit Hours
1

Total Contact Hours
Total Instructor Contact Hours:
23.5

Total Student Contact Hours:
23.5

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
Successful completion of AMTEC Course Module 1073 Post Assessment (85%) and instructor assessment of lab activities.

Goals, Topics, and Objectives

Course Goals
To provide students the opportunity to become familiar with the fundamentals of Electricity/Electronics, utilizing digital learning materials and hands-on labs.

Core Course Topics
1. Components
2. Relay Types
3. Switching Contact Characteristics
4. Circuit Layout
5. Circuit Types
6. Logic Circuits
7. Output Circuits
8. Fuses
9. Circuit Breakers

Describe the properties of semiconductor material.

Determine the correct operation and application of diodes and transistors.

Describe key elements of a vision system.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
- AMTEC Modular Pre and Post exams
- Lab evaluation utilizing a standard evaluation matrix

Texts
AMTEC Module 1073 Digital Learning Materials

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for CIMEL 102

CIMEL103 - Solid State Devices

Overview

Subject
Electrical Engineering Technol

Academic Department
Adv Manufacturing/Fabrication

School
Business, Entrepreneurshp, PD

Course Description
Introduces the basic concepts of solid state devices and applications: semiconductor theory, the operational characteristics of devices such as the diode, bipolar junction transistors (BJT) and field effect transistors (FET), polarity, biasing, rectification and amplification. Introduces the basic DC power supply. Includes a discussion of camera-type vision systems, barcode readers and laser etchers as common Solid State devices found in industry. Pre-requisite: CIMEL 102 or Instructor Permission.

Course Pre-requisite(s)
CIMEL102 Control Circuits & Components or Instructor Permission

Credit Hours
1

Total Contact Hours
Total Instructor Contact Hours:
23.5

Total Student Contact Hours:
23.5

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
Successful completion of AMTEC Course Module 1074 Post Assessment (85%) and instructor assessment of lab activities.

Goals, Topics, and Objectives

Course Goals
To provide students the opportunity to become familiar with the fundamentals of Electricity/Electronics, utilizing digital learning materials and hands-on labs.

Core Course Topics
1. Semiconductor
2. Diodes
3. Transistors
4. Other Solid State Devices
5. Fiber Optic Hardware
6. Solid State Device Systems

Describe the properties of semiconductor material.

Determine the correct operation and application of diodes and transistors.

Describe key elements of a vision system.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
- AMTEC Modular Pre and Post exams
- Lab activities and evaluation of activities utilizing a standard evaluation matrix

Texts
AMTEC Module 1074 Digital Learning Materials

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for CIMEL 103

CIMEL104 - Controls and Instrumentation-Fundamental

Overview

Subject
Electrical Engineering Technol

Academic Department
Adv Manufacturing/Fabrication

School
Business, Entrepreneurshp, PD

Course Description
Explores soldering techniques and Electromagnetic/Static considerations when handling, replacing, and repairing of electronic components. Also discusses various troubleshooting methodologies.

Course Pre-requisite(s)
CIMEL103 Solid State Devices or Instructor Permission

Credit Hours
1

Total Contact Hours
Total Instructor Contact Hours:
23.5

Total Student Contact Hours:
23.5

Course Fee
246

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
Successful completion of current Post Assessment (85%) and instructor assessment of lab activities.

Goals, Topics, and Objectives

Course Goals
To provide students the fundamentals of Control and Instrumentation, utilizing digital learning materials and hands-on labs.

Core Course Topics
1. Theory of soldering and the proper use of soldering tools including wicks and suckers.
2. Troubleshooting methodologies including: the Simpler Method and Half Splitting.
3. Circuit diagnostic indications of faulted components, shorts and opens.
4. Electrical Static Discharge and Electromagnetic Interference concerns with modern technology.

Demonstrate the proper use of soldering equipment to remove and install electronic components and to create splices.

Develop a graphical representation of the troubleshooting methods used to isolate faults in a sequencing machine and an electronic circuit.

Demonstrate the ability to isolate faults in circuits to include failed components, shorts and opens and use common test equipment

Demonstrate common methods of preventing Electrical Static Discharge when handling and soldering electronic components and modules.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
- Pre and Post exams
- Completion of assigned labs evaluated using standard rubrics (see Division).

Texts
See Division for required texts/materials.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for CIMEL 104

CIMEL105 - Sensors and Photoeyes

Overview

Subject
Electrical Engineering Technol

Academic Department
Adv Manufacturing/Fabrication

School
Business, Entrepreneurshp, PD

Course Description
This course presents common circuits and sensors to perform the measurement of process flow variables such as pressure, level, temperature, flow and analytic characteristics. Positional sensors are also developed. Pre-requisite: CIMEL 104 or Instructor Permission.

Course Pre-requisite(s)
CIMEL104 Control & Instrumentation Fund or Instructor Permission

Credit Hours
1

Total Contact Hours

Total Instructor Contact Hours:
23.5

Total Student Contact Hours:
23.5

Course Fee
246

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
Successful completion of current Post Assessment (85%) and instructor assessment of lab activities.

Goals, Topics, and Objectives

Course Goals
To provide students the opportunity to learn the fundamentals of Sensors and Photoeyes.

Core Course Topics

1. Introduction to process control including the measurement of flow, temperature, pressure, level, and analytics and their related transducers.
2. Industrial positioning sensors including optical and proximity sensors.
3. Process control test equipment
4. Target composition, size, shape, and orientation effects on sensor detection.

Demonstrate the use of common circuits, transmitters and transducers for the measurement of process variables of flow, level, temp, pressure and analytic monitoring on a working process control system.

Construct a circuit to determine the working range of the devices and whether or not they exhibit hysteresis and use optical and proximity sensors

Determine the programed settings of a transmitter and determine if it is working properly by using common test equipment, process simulators and digital manometers.

Determine the operational effect on various sensors by using targets composed of different materials, sizes and part orientation.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement

- Pre and Post exams
- Completion of assigned labs evaluated using standard rubrics (see Division).

Texts
See Division for required texts/materials.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for CIMEL 105

CIMEL107 - Final Control Elements

Overview

Subject
Electrical Engineering Technol

Academic Department
Adv Manufacturing/Fabrication

School
Business, Entrepreneurshp, PD

Course Description
This course explores automation output devices including AC, DC, and servo motors, variable speed drives, relays, motor starters and sizing of components for various applications. Pre-requisites: CIMEL 106 or Instructor Permission.

Course Pre-requisite(s)
CIMEL106 or Instructor Permission

Credit Hours
1

Total Contact Hours

Total Instructor Contact Hours:
23.5

Total Student Contact Hours:
23.5

Course Fee
246

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
Successful completion of current Post Assessment (85%) and instructor assessment of lab activities.

Goals, Topics, and Objectives

Course Goals
To provide students the opportunity to learn the fundamentals of Final Control Elements, utilizing digital learning materials and hands-on labs.

Core Course Topics

1. DC Motor fundamentals including an evaluation of armature and field currents in series, shunt and compound configurations.
2. AC motor fundamentals including induction and synchronous operation and an evaluation of no-load, full load, and starting currents.
3. Fundamentals of Variable Frequency drives and how they control motor speed, including a block diagram analysis and common settings/ programming
4. Classical motor starter circuits reflecting overloads, stop/start circuitry, and forward/reversing configurations

Construct and evaluate the torque, speed regulation and currents of DC motors wired in Series, Shunt and Compound configurations.

Construct, measure, and evaluate the currents associated with starting no-load and full load conditions of a AC induction motor

Demonstrate the proper set up of a variable frequency drive to control: Acceleration, Deceleration, and speed control of an AC motor.

From an electrical print, wire a motor starter circuit to include: start/ stop, overloads, and proper use of the Auxiliary contacts of the motor starter in the control of an AC induction motor. *

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement

- Pre and Post exams
- Completion of assigned labs evaluated using standard Rubrics (see Division).

Texts
See Division for required texts/materials.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for CIMEL 107

CIMEL108 - Introduction to PLCs

Overview

Subject
Electrical Engineering Technol

Academic Department
Adv Manufacturing/Fabrication

School
Business, Entrepreneurshp, PD

Course Description
Introduces various elements of basic PLCs including the identification of programmable logic control systems as well as overview of PLC system architectures. Provides instruction in basic numbering systems, computer terminology, PLC functions, program structures, and point addressing basics. Pre-requisites: CIMEL 107 or Instructor Permission.

Course Pre-requisite(s)
CIMEL107 Final Control Elements or Instructor Permission

Credit Hours
1

Total Contact Hours
Total Instructor Contact Hours:
23.5

Total Student Contact Hours:
23.5

Course Fee
246

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
Successful completion of current Post Assessment (85%) and instructor assessment of lab activities.

Goals, Topics, and Objectives

Course Goals
To provide students the opportunity to learn the fundamentals of Introduction to PLCs, utilizing digital learning materials and hands-on labs.

Core Course Topics
1. PLC Hardware Overview
2. Basic Numbering Systems and Computer Terminology
3. Basic PLC Functions, Instructions, Program Structures and Language Standards
4. Relationships between the "and", "or", and "not" functions to their PLC equivalents

List the functionality of the components of a typical PLC system

Convert values from the decimal based system into, binary, octal, hexadecimal and ASCII.

Match the PLC logic rungs to the the "and", "or" ,"and not" functions when given typical PLC logic .

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
- Pre and Post exams
- Completion of all assigned labs evaluated using standard Rubrics (see Division).

Texts
See Division for required texts/materials.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for CIMEL 108

CIMEL109 - Plc Hardware and Software

Overview

Subject
Electrical Engineering Technol

Academic Department
Adv Manufacturing/Fabrication

School
Business, Entrepreneurshp, PD

Course Description
Introduces memory and project organization within a PLC processor, the installation, wiring and configuration of I/O modules, as well as how to start a new project. Pre-requisites: CIMEL 108 or Instructor Permission.

Course Pre-requisite(s)
CIMEL108 Introduction to PLCs or Instructor Permission

Credit Hours
1

Total Contact Hours
Total Instructor Contact Hours:
23.5

Total Student Contact Hours:
23.5

Course Fee
246

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
Successful completion of current Post Assessment (85%) and instructor assessment of lab activities.

Goals, Topics, and Objectives

Course Goals
To provide students the opportunity to learn the fundamentals of PLC Hardware and Software, utilizing digital learning materials and hands-on labs.

Core Course Topics
1. RSLogix and RSLinx
2. PLC Program Elements, Memory Allocation and Address Types and Formats
3. Input/Output (I/O) Addressing
4. I/O Configuration

Establish communication between the PLC and laptop computer.

Upload, download, and edit PLC programs.

Add an input and output module to the I/O chassis by hand.

Configure new I/O in RSLogix 5000.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
- Pre and Post exams
- Completion of all assigned labs evaluated using standard Rubrics (see Division).

Texts
See Division for required texts/materials.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for CIMEL 109

CIMEL110 - Programming PLCs

Overview

Subject
Electrical Engineering Technol

Academic Department
Adv Manufacturing/Fabrication

School
Business, Entrepreneurshp, PD

Course Description
Introduces various elements of programming PLCs. Addresses the basic elements of PLC programming and routines. Requires student to program using ladder logic, structured text, sequential function chart, and function block languages. Pre-requisites: CIMEL 109 or Instructor Permission.

Course Pre-requisite(s)
CIMEL109 PLC Hardware & Software or Instructor Permission

Credit Hours
1

Total Contact Hours

Total Instructor Contact Hours:
23.5

Total Student Contact Hours:
23.5

Course Fee
246

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
Successful completion of current Post Assessment (85%) and instructor assessment of lab activities.

Goals, Topics, and Objectives

Course Goals
To provide students the opportunity to learn the fundamentals of Programming PLCs, utilizing digital learning materials and hands-on labs.

Core Course Topics

1. Basic PLC Programing tasks (i.e. titles, tasks, routines, configurations and their attributes)
2. Ladder Diagram Programing
3. Mathematic Instructions and Matrix (file) Fundamentals
4. Ladder Diagrams, Structured Text, Sequential Functions Charts and Function Block Programming Techniques

Create a ladder diagram program in a routine.

Design, enter, edit and run a program to control simple pneumatic machine functions.

Edit a program to include production counts and hourly averages using mathematic function.

Construct equivalent logic programs using ladder logic, structured text, sequential functions, and function blocks.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement

- Pre and Post exams
- Completion of all assigned labs evaluated using standard rubrics (see Division).

Texts
See Division for required texts/materials.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for CIMEL 110

CIMEL111 - PLC Communication

Overview

Subject
Electrical Engineering Technol

Academic Department
Adv Manufacturing/Fabrication

School
Business, Entrepreneurshp, PD

Course Description
Introduces various elements of industrial communications using PLCs. Addresses common types of control communications in an industrial environment. Includes discussion of PLC addressing used in communications. Pre-requisites: CIMEL 110 or Instructor Permission.

Course Pre-requisite(s)
CIMEL110 Programming PLCs or Instructor Permission

Credit Hours
1

Total Contact Hours

Total Instructor Contact Hours:
23.5

Total Student Contact Hours:
23.5

Course Fee
246

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
Successful completion of current Post Assessment (85%) and instructor assessment of lab activities.

Goals, Topics, and Objectives

Course Goals
To provide students the opportunity to learn the fundamentals of PLC Communciation, utilizing digital learning materials and hands-on labs.

Core Course Topics

1. Communication Systems in a Conventional Industrial Networks
2. Ethernet TCP/IP Protocol
3. Communication Systems in PLCs

List common types of data communications and their characteristics.

Setup a system using TCIP/IP protocol.

Troubleshoot a PLC communication system.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement

- Pre and Post exams
- Completion of all assigned labs evaluated by using standard rubrics (see Division).

Texts
See Division for required texts/materials.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for CIMEL 111

CIMEL112 - Introduction to Robotics

Overview

Subject
Electrical Engineering Technol

Academic Department
Adv Manufacturing/Fabrication

School
Business, Entrepreneurshp, PD

Course Description
Introduces industrial robotic safety standards, historic timeline of industrial robots, industrial classification of robots, common industrial applications of robots, basic system components found in industrial robot applications, robotic motion concepts and common robot terms and definitions used in computer integrated manufacturing (CIM). Pre-requisites: CIMEL 111 or Instructor Permission.

Course Pre-requisite(s)
CIMEL111 PLC Communication or Instructor Permission

Credit Hours
1

Total Contact Hours
Total Instructor Contact Hours:
23.5

Total Student Contact Hours:
23.5

Course Fee
246

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
Successful completion of current Post Assessment (85%) and instructor assessment of lab activities.

Goals, Topics, and Objectives

Course Goals
To provide students the opportunity to learn the fundamentals of Introduction to Robotics, utilizing digital learning materials and hands-on labs.

Core Course Topics
1. Robotic Safety Standards
2. Industrial Robotic Overview and History
3. Linematics and The Robotic Coordinate System
4. End of Arm Tooling (EOAT)
5. Computer Integrated Manufacturing (CIM)

Demonstrate industrial robotic safety standards.
Delineate the history of industrial robots and list common applications.
Employment planning of motion characteristics of a robotic coordinate system.
Break down requirements for common End Of Arm Tooling (EOAT) devices and sensors related to both the system and written robotics program.
Diagram a basic Computer Integrated Manufacturing (CIM) proces

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
- Pre and Post exams
- Completion of all assigned labs evaluated using standard Rubrics (see Division).

Texts
See Division for required texts/materials.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for CIMEL 112

CIMEL113 - Programming/Editing Robots

Overview

Subject
Electrical Engineering Technol

Academic Department
Adv Manufacturing/Fabrication

School
Business, Entrepreneurshp, PD

Course Description
Introduces robotic systems and programming. Reviews robotic system application, automated system safety, robotic system composition, robotic motion control, fundamental programming commands, and program editing. Emphasizes the fundamentals of robot control. Aids students in electronics, welding, computer technology, and general sciences. Pre-requisites: CIMEL 112 or Instructor Permission.

Course Pre-requisite(s)
CIMEL112 Introduction to Robotics or Instructor Permission

Credit Hours
1

Total Contact Hours
Total Instructor Contact Hours:
23.5

Total Student Contact Hours:
23.5

Course Fee
246

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
Successful completion of current Post Assessment (85%) and instructor assessment of lab activities.

Goals, Topics, and Objectives

Course Goals
To provide students the opportunity to learn the fundamentals of Programming/Editing RobotsRobot, utilizing digital learning materials and hands-on labs.

Core Course Topics
1. Robot Start Up and Motions
2. Robotic Programs
3. Programming Instructions
4. Creating and Writing Programs
5. Copying, Editing, and Deleting a Program
6. Using the Robot Program

Power up and jog the robot through its range of motion.
Load and execute a robotic program
Create, modify, and execute a material handling program.*
Copy, edit, and delete a program.
Monitor, force, and use input and output signals in a robot program.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
- Pre and Post exams
- Completion of all assigned labs evaluated using standard Rubrics (see Division).

Texts
See Division for requied texts/materials.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for CIMEL 113

CIMEL114 - Robot Maintenance and PM

Overview

Subject
Electrical Engineering Technol

Academic Department
Adv Manufacturing/Fabrication

School
Business, Entrepreneurshp, PD

Course Description
Instructs an operator, technician, engineer, programmer, or student to master the preventive maintenance techniques required for a robot and their backup systems. Pre-requisites: CIMEL 113 or Instructor Permission.

Course Pre-requisite(s)
CIMEL113 Programming/Editing Robots or Instructor Permission

Credit Hours
1

Total Contact Hours

Total Instructor Contact Hours:
23.5

Total Student Contact Hours:
23.5

Course Fee
246

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
Successful completion of current Post Assessment (85%) and instructor assessment of lab activities.

Goals, Topics, and Objectives

Course Goals
To provide students the opportunity to learn the fundamentals of Robot Maintenance and PM, utilizing digital learning materials and hands-on labs.

Core Course Topics

1. Mastering Concepts
2. Performing PM on Robot Components
3. Program Backups

Execute the required tasks for robot backup system while saving and restoring programs files.

Demonstrate the ability to generate new master count numbers and re-master a robot when original mastering count numbers have been lost.*

Back-up systems and replace backup batteries on robotics equipment.

Perform recommended preventive maintenance lubrication procedures of all required robot components and the End Of Arm Tooling (EOAT) devices or sensors used with the manipulator.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement

- Pre and Post exams
- Completion of all assigned labs evaluated using standard rubrics (see Division)

Texts
See Division for required texts/materials.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for CIMEL 114

CIMEL115 - Error Codes and Troubleshooting

Overview

Subject
Electrical Engineering Technol

Academic Department
Adv Manufacturing/Fabrication

School
Business, Entrepreneurshp, PD

Course Description
Instructs operators, technicians, engineers, programmers, or students on the basic recovery procedures needed to interpret robot error codes and perform a safe recovery start up procedure on robotics equipment. Pre-requisites: CIMEL 114 or Instructor Permission.

Course Pre-requisite(s)
CIMEL114 Robot Maintenance and PM or Instructor Permission

Credit Hours
1

Total Contact Hours

Total Instructor Contact Hours:
23.5

Total Student Contact Hours:
23.5

Course Fee
246

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
Successful completion of current Post Assessment (85%) and instructor assessment of lab activities.

Goals, Topics, and Objectives

Course Goals
To provide students the opportunity to learn the fundamentals of Error Codes and Troubleshooting, utilizing digital learning materials and hands-on labs.

Core Course Topics

1. Use of the controller's maintenance manual
2. Alarms and recovery actions
3. Error codes and recovery actions
4. Robot and robot cell safety

Implement all steps necessary to recover from a faulted condition using the robot controller maintenance manual and given an alarm fault.

Recover from a fault condition including fuses and circuit boards using robot controller maintenance manual and a list of error codes.

Draw a flow chart illustrating the sequence of actions to place the system into Automatic Mode recovering from a safety signal.

Demonstrate all required safety practices when working with a robot in both simulator mode and active production cell environments.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement

- Pre and Post exams
- Completion of all assigned labs evaluated using standard rubrics (see Division).

Texts
See Division for required texts/materials

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for CIMEL 115

CIMEL116 - Integration of PLCs & Robots

Overview

Subject
Electrical Engineering Technol

Academic Department
Adv Manufacturing/Fabrication

School
Business, Entrepreneurshp, PD

Course Description
Introduces concepts associated with integrating robotic applications in a PLC-controlled, automated system. Includes discussion of the standard safety and interface signals associated with integrated systems, as well as various types of robotic applications along with the interface signals typically associated with each application. Stresses the programming concepts that support optimizing cycle time. Pre-requisites: CIMEL 115 or Instructor Permission.

Course Pre-requisite(s)
CIMEL115 Error Codes & Troubleshooting or Instructor Permission

Credit Hours
1

Total Contact Hours
Total Instructor Contact Hours:
23.5

Total Student Contact Hours:
23.5

Course Fee
246

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
Successful completion of current Post Assessment (85%) and instructor assessment of lab activities.

Goals, Topics, and Objectives

Course Goals
To provide students the opportunity to learn the fundamentals of Integration of PLCs and Robotics, utilizing digital learning materials and hands-on labs.

Core Course Topics
1. Systems integration and control architecture and their relationships to safety
2. Common interface signals between PLC & robot
3. Robot Interfacing signals association with material handling and spot welding systems
4. Vision applications

List several methods of interlocking safety signals between and PLC and robot controller.

Identify common interface signals regarding the selection of robot program number and initiation from the PLC.

List the expected interface signals between the robot and the weld controller.

Distinguish between and vision inspection and vision guidance and identify their characteristics when given three vision applications.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
- Pre and Post exams
- Completion of all assigned labs to be evaluated by using standard Rubrics (see Division).

Texts
See Division for required texts/materials.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for CIMEL 116

CIS100 - Introduction to Information Technology

Overview

Subject
Computer Information Systems

Academic Department
Computer Technology

School
Business, Entrepreneurshp, PD

Course Description
This course is a survey of computer, information and digital technology. Covers computer hardware, networks, operating systems, file management, and common productivity software, including word processing, spreadsheet, and presentation software. Professional email, computer security, privacy, netiquette, ethics, and social media practices are examined. An introduction to artificial intelligence and its application to various fields is also covered. This course satisfies the HFC's General Education Computer Technology requirement.

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
45

Academic Level
Undergraduate

General Education Category
Computer Technology

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Departmental Exam

Credit for Prior College Level Learning (CPCLL) Details
Minimum Departmental Exam Score

85.00

Goals, Topics, and Objectives

Core Course Topics
1. Computer Hardware: Input, Output, Processing, and Storage
2. Computer Networks
3. Operating Systems, File Management and Utility Programs
4. Productivity Software
5. Computer Security, Privacy, Netiquette, Ethics, and Social Media
6. Artificial Intelligence

Operate basic computer hardware including common input, output, and storage devices.

Describe important concepts related to computer hardware, e.g., memory, secondary storage, storage units, speed, etc.

Log into and out of a computer network including the HFC Network.

Compose a professional email.

Send and open e-mail including attachments.

Describe the difference between various types of networks, e.g., HFC Network, LANs, WANs, the Internet, etc.

Effectively use the World-Wide-Web, search engines and other information resources online.

Describe the purpose and functions of an operating system (OS).

Differentiate the major operating systems, e.g., Windows, Mac, Linux, etc.

Perform file management tasks including finding, organizing, saving, copying, and printing files in client, network and cloud-based environments.

Utilize common utility program including compression/zip and pdf files.

Utilize client, network and cloud-based application and productivity software.

Create word processing documents that incorporate a variety of formatting options.

Create spreadsheets that incorporate data, information, formulas, functions, data analysis and a variety of formatting options.

Create, modify, and view a professional slideshow using a variety of presentation software features.

Recognize common malware threats to computer security and privacy such as viruses, phishing, spoofing, ransomware, and identity theft.

Identify common methods of malware, security, and privacy protection such as antivirus software, safe browsing and email usage, software updates, strong passwords, firewalls, and VPNs.

Identify common computer ethical and netiquette standards and expectations.

Describe the benefits and risks of social media.

Describe various types of artificial intelligence, e.g., weak, strong, multi-model.

Describe applications of A.I. in various fields, such as education, health care, national defense, manufacturing, graphics, and software engineering.

Demonstrate the effective use of multiple current A.I. systems.

Describe the ethical implications to artificial intelligence, e.g., academic integrity, bias, hallucinations, career skills, misinformation, deepfakes.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of academic achievement may include (but is not limited to) exams, quizzes, homework, and laboratory assignments.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for CIS 100

CIS109 - Apple Support

Overview

Subject
Computer Information Systems

Academic Department
Computer Technology

School
Business, Entrepreneurshp, PD

Course Description
An introductory-level course focusing on using and supporting Apple products with primary emphasis on the Apple Operating Systems (OS), including installing, configuring, using, maintaining, troubleshooting, and securing. Working with applications, file management, network connections, peripherals, mobile products, and cross-platform compatibility are also covered. Suitable for end-users seeking an in-depth knowledge of Apple products or help desk specialists/computer technicians who will be supporting Apple products within an organization.

Course Pre-requisite(s)
CIS100 Intro Info Tech

Credit Hours

3

Total Contact Hours

Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Installation and Configuration
2. Startup Process
3. Applications and Processes
4. Communication and Personal Information Management
5. File System and File Management
6. Security
7. Networking and File Sharing
8. Peripherals and Printing
9. Cross-Platform Compatibility
10. Troubleshooting
11. Mobile Apple Products

Install and configure Apple operating systems.

Identify startup process phases.

Install, manage, and troubleshoot applications and processes.

Communicate and manage personal information using services such as mail, address books, calender's.

Manage the Apple file systems and files; e.g., file system, directory structure, Spotlight, Disk Utility, file archives, backup, disk images, command-line interface, etc.

Secure the OS environment; e.g., user accounts, administrator accounts, encryption, firewall, privacy controls, etc.

Configure network connections.

Connect and manage peripherals.

Troubleshoot bootup and system issues.

Provide basic support for mobile Apple products.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of academic achievement may include (but is not limited to) exams, quizzes, homework, and laboratory assignments.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for CIS 109

CIS111 - SQL for Database Development

Overview

Subject
Computer Information Systems

Academic Department
Computer Technology

School
Business, Entrepreneurshp, PD

Course Description
An intermediate-level course familiarizing the student with the SQL language used to retrieve and modify tables and data within a SQL Server database management system. Covers outer joins, summary queries, and subqueries. Also discusses using normalization techniques to design and create database structures, views, scripts, stored procedures, scalar functions, and triggers.

Course Pre-requisite(s)
CIS122 Web Internet Technologies or CIS125 Prin of Programming Logic or CIS130 C# Programming or CIS170 C Programming or Instructor Permission

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
62

Total Student Contact Hours:
62

Course Fee
45

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. An introduction to relational databases and SQL
2. How to work with SQL server databases
3. How to retrieve data from a single table
4. How to retrieve data from two or more tables
5. How to code summary queries
6. How to code subqueries
7. How to modify data within a table
8. SQL server data types
9. How to design a database
10. How to create and implement a database
11. How to code scripts, views, stored procedures, tiggers, and scalar functions

Compose SQL statements that retrieve data from one table structure using the SELECT-FROM-WHERE-ORDER BY syntax.

Generate SQL statements that retrieve data from more than one table coding the correct join relationship within the FROM clause.

Write SQL statements that incorporate a subquery within the SELECT list, FROM clause, or WHERE clause.

Construct SQL statements using the UPDATE, INSERT and DELETE statement that modify data within a table structure.

Organize, plan, and implement a database structure using normalizing techniques based on example documents used within a business entity.

Code SQL views, stored procedures, triggers, and scalar functions.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of academic achievement may include (but is not limited to) exams, quizzes, homework, and laboratory assignments.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for CIS 111

CIS112 - Introduction to Networking

Overview

Subject
Computer Information Systems

Academic Department
Computer Technology

School
Business, Entrepreneurshp, PD

Course Description
An introductory-level course covering the basics of Local and Wide Area Networking. Discusses the OSI model, TCP/IP, Ethernet, media architecture, and networking hardware. Also covers basic Wireless concepts, DNS, the Internet as well as how to troubleshoot common network problems.

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
50

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Departmental Exam, Skilled Demonstration, Licensure/certifications

Credit for Prior College Level Learning (CPCLL) Details
Skilled Demonstration Details

Skills-based assessment proficient score, assessment administered by the Computer Information Systems department faculty. Faculty will assess skills-based assessment based on evaluation rubric. Assessment information located in Department Office. Students must also complete a departmental exam and have proper licensure/certification.

Licensure/Certification

CompTia Network+ Certification or TestOut Network Pro Certification

Licensure/Certification Details

CompTia Network+ Certification OR TestOut Network Pro Certification must be current. Department faculty will verify certification(s). Verified certifications, and the Credit for Prior College-Level Learning application will be signed, copied, and retained in the Department Office. Students must also complete a departmental exam and a skilled demonstration.

Goals, Topics, and Objectives

Core Course Topics

1. Networking Standards and the OSI Model
2. Transmission Basics and Networking Media
3. TCP/IP Protocols
4. Topologies and Ethernet Standards
5. WANs and Remote Connectivity
6. Networking Hardware
7. Troubleshooting Basic Network Issues
8. Basic Wireless Networking Concepts

Discuss networking standards and the OSI Model.

Analyze TCP/IP configurations using both command line and GUI tools.

Identify both LAN and WAN topologies and discuss their strengths and weaknesses.

Explain the differences between common networking hardware components.

Describe basic Wireless LAN concepts.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Examinations and Lab Evaluations

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for CIS 112

CIS113 - Wireless LANs

Overview

Subject
Computer Information Systems

Academic Department
Computer Technology

School
Business, Entrepreneurshp, PD

Course Description
An intermediate-level course covering Wireless Networking. Discusses the IEEE 802.11 standards and the relationship to the OSI model. Also covers the planning, installation, configuration, troubleshooting, and securing of Wireless Networking products.

Course Pre-requisite(s)
CIS112 Intro to Networking or CNT110 CCNA: Networking I

Credit Hours
2

Total Contact Hours

Total Instructor Contact Hours:
32

Total Student Contact Hours:
32

Course Fee
40

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Departmental Exam, Skilled Demonstration, Licensure/certifications

Credit for Prior College Level Learning (CPCLL) Details
Skilled Demonstration Details

Skills-based assessment proficient score, assessment administered by the Computer Information Systems department faculty. Faculty will assess skills-based assessment based on evaluation rubric. Assessment information located in Department Office. Students must also complete a departmental exam and have proper licensure/certification.

Licensure/Certification

CWNA or CCNA Wireless Certification

Licensure/Certification Details

CWNA or CCNA Wireless Certification must be current. Department faculty will verify certification(s). Verified certifications, and the Credit for Prior College-Level Learning application will be signed, copied, and retained in the Department Office. Students must also complete a departmental exam and a skilled demonstration.

Goals, Topics, and Objectives

Core Course Topics

1. Radio Frequency Basics
2. Wireless Networking Devices
3. Wireless Client Devices
4. Planning the Wireless LAN
5. Installing and Troubleshooting a Wireless LAN
6. Administering and Optimizing a Wireless LAN
7. Security Analysis
8. Security Tools and Solutions

Recognize the potential use of wireless technologies in business.

Discuss the IEEE 802.11 standards for WLANs.

Develop site plans for building and securing a WLAN.

Install and configure WLAN devices.

Troubleshoot technical problems associated with WLANs.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Quizzes and Examinations

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for CIS 113

CIS119 - Math for Computer Professional

Overview

Subject
Computer Information Systems

Academic Department
Computer Technology

School
Business, Entrepreneurshp, PD

Course Description
Covers basic mathematics for the computer and information technology field. Focuses on how computers process and store numbers and applications of mathematics in practical computer programs involving arithmetic, algebra, statistics, geometry, and physics. Course will utilize a modern programming language in a lab environment.

Course Pre-requisite(s)
A satisfactory score on the Math placement exam OR Eligible for gateway MATH courses at HFC.

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
62

Total Student Contact Hours:
62

Course Fee
45

Academic Level
Undergraduate

General Education Category
Mathematics

Michigan Transfer Agreement (MTA) Category
Category 3: Mathematics - Applied Degrees

Goals, Topics, and Objectives

Core Course Topics

1. Numbering Systems
2. Arithmetic
3. Algebra
4. Boolean Algebra and Logic
5. Basic Statistics and Functions
6. Measurement and Units
7. Basic Geometry
8. Basic Physics
9. Culminating Project

Describe how the binary numbering system is used in computing.

Describe how the octal numbering system is used in computing.

Describe how the decimal numbering system is used in computing.

Describe how the hexidecimal numbering system is used in computing.

Convert numbers between binary, octal, decimal and hexidecimal numbering systems on paper.

Describe how computers use data types and memory to store numbers.

Apply numbering systems in a practical computer program

Troubleshoot computer programs with mathematical anomalies resulting from how computers process and store numbers.

Perform basic addition, subtraction, multiplication, and division calculations with whole numbers, fractions, decimals, and percentages with and without a computer program.

Calculate power and modulus with and without a computer program.

Create practical computer programs using arithmetic, e.g. payroll, loan calculator, grade calculator, etc.

Describe variables, constants, expressions and equations.

Describe the order of operations and associativity.

Design a computer algorithm involving algebra based on provided program specifications.

Create practical computer programs using variables, constants, equations and expressions.

Describe relational and logical operators.

Describe relational and logical operator precedence.

Solve truth tables for a variety of conditions and expressions.

Design a computer algorithm using Boolean logic based on provided program specifications.

Create practical computer programs using Boolean logic.

Solve for the mean, median, and mode of a list of numbers with and without a computer program.

Utilize built-in programming language functions for formatting numbers, generating random numbers and calculating statistics.

Perform practical calculations involving measurement and units with and without a computer program.

Perform practical geometric calculations with and without a computer program.

Perform practical physics calculations with and without a computer program.

Apply mathematical, algorithmic and programming techniques in a practical culminating project, e.g. encryption, game physics, data science, sorting algorithms, etc.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of academic achievement may include (but is not limited to) exams, quizzes, homework, and laboratory assignments.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for CIS 119

CIS122 - Web Internet Technologies

Overview

Subject
Computer Information Systems

Academic Department
Computer Technology

School
Business, Entrepreneurshp, PD

Course Description
An introductory-level course covering the Internet, networking, web development, and security. Skills demonstrated include web development and secure programming in HTML, CSS, JavaScript, PHP, and web database connectivity.

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
62

Total Student Contact Hours:
62

Course Fee
45

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Departmental Exam, Skilled Demonstration, Portfolio Review, Other

Credit for Prior College Level Learning (CPCLL) Details
Minimum Departmental Exam Score

80.00

Departmental Exam Details

Departmental exam, given in department by department faculty. Faculty will grade exam based on evaluation rubric. Evaluation rubric and exam topics and objectives located in Division Office.

Skilled Demonstration Details

Skills-based assessment score of 80% or higher, assessment administered by the Computer Information Systems department faculty. Faculty will assess skills-based assessment based on evaluation rubric. Assessment information located in Division Office. Students must also complete a departmental exam, provide a portfolio, and have full-time work experience.

Portfolio Review Details

Technical, performance-based portfolio of work that illustrates competency in the course learning objectives. Department faculty will evaluate submitted portfolios. Evaluation rubric and additional information located in Division Office.

Other Details

Eligible candidates must have worked full-time in a position for at least two years within the past four years where the job title and primary job responsibilities directly relate to the course subject matter, with documentation of such from the employer to be reviewed by the Computer Information Systems department.

Goals, Topics, and Objectives

Core Course Topics

1. Web development education and career paths
2. Client/server architecture
3. Web development process and technologies
4. FTP/web site publishing
5. HTML and CSS web page development
6. Dynamic, server-side web programming
7. Database integration
8. Web site testing
9. Web site debugging
10. Web/Internet security

Identify educational, training, certification and career paths in web development.

Explain the role of networking protocols and technologies in the Internet and Web.

Explain how the client/server networking architecture is involved in and impacts web development.

Describe the web development process and the technology/tools used to carry it out.

Demonstrate how to FTP/publish a web site.

Create HTML and CSS-based web pages.

Use JavaScript and PHP to develop secure, dynamic web pages.

Integrate a database into a web page/site.

Test web pages and code.

Debug web pages and code.

Describe various Internet and web security threats and protection techniques.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of academic achievement may include (but is not limited to) exams, quizzes, homework, and laboratory assignments.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for CIS 122

CIS125 - Principles of Programming Logic

Overview

Subject
Computer Information Systems

Academic Department
Computer Technology

School
Business, Entrepreneurshp, PD

Course Description
An introductory-level course presenting programming logic concepts and skills. Emphasizes structured methods of programming. Covers input, output, selection/decisions, loops, arrays, data validation, functions, and modules. A computer lab is used for debugging, compilation and testing.

Credit Hours
4

Total Contact Hours
Total Instructor Contact Hours:
62

Total Student Contact Hours:
62

Course Fee
45

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Computer Hardware and Software
2. Problem Solving and Program Development
3. Constants and Variables
4. Input, Process, Output
5. Arithmetic Operations and Expressions
6. Selection/Decisions Statements
7. Repetition/Loop Statements
8. Modules and Functions
9. Arrays
10. Data Validation

Describe how programs work and how data is stored.

Create programs that effectively utilize input, output, decisions, loops, functions, and arrays.

Write programs that follow common style techniques for readability and ease of maintenance.

Use test data for program testing and input validation.

Use a language develop logic skills and create programs.

Demonstrate effective debugging skills.

Contrast and evaluate alternative methods for solving problems.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of academic achievement may include (but is not limited to) exams, quizzes, homework, and laboratory assignments.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for CIS 125

CIS126 - HTML/CSS Web Programming

Overview

Subject
Computer Information Systems

Academic Department
Computer Technology

School
Business, Entrepreneurshp, PD

Course Description
Covers HyperText Markup Language (HTML) coding practices for both current and future browsers. Uses HTML, Cascading Style Sheets (CSS) extensively validating according to the guidelines of the World Wide Web Consortium (W3C). Introduces JavaScript language. Includes the creation and publishing of a website using HTML and CSS.

Credit Hours
4

Total Contact Hours
Total Instructor Contact Hours:
62

Total Student Contact Hours:
62

Course Fee
45

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Internet and World-Wide-Web (WWW) concepts
2. HTML5
3. CSS3
4. Web design best practices
5. Page layout best practices
6. User and web accessibility
7. Website promotion and SEO
8. JavaScript
9. Multimedia and Interactivity
10. Domain names, hosting, and publishing a web site

Explain Internet and world-wide-web concepts related to web development

Code HTML5 web pages.

Create the body and content of a web page with HTML tags, attributes, values, e.g. headings, paragraphs, hyperlinks, images, tables, forms, etc.

Demonstrate proficient use of CSS (Cascading Style Sheets) to format the appearance of web pages and provide layout.

Define web design best practices.

Create web page layouts using the most recent industry best practices.

Implement user accessibility best practices, e.g. mobile/responsive, people with disabilities, etc.

Use W3C to validate HTML and CSS.

Identify recommended practices for web site promotion and Search Engine Optimization (SEO)

Create and use a JavaScript in a web page.

Incorporate multimedia and Interactivity into a web page.

Explain what acquiring a domain name, hosting, and publishing a web site entails.

Publish a web site.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of academic achievement may include (but is not limited to) exams, quizzes, homework, and laboratory assignments.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for CIS 126

CIS129 - Intro to UNIX With Shell Scripting

Overview

Subject
Computer Information Systems

Academic Department
Computer Technology

School
Business, Entrepreneurshp, PD

Course Description
An intermediate-level course covering the fundamentals of the UNIX Operating System, including the file system, editor, and standard UNIX utilities. Emphasizes how the UNIX shell operates, and also presents advanced forms of utilities, regular expressions, and shell scripts.

Course Pre-requisite(s)
CIS125 Prin of Programming Logic

Credit Hours
4

Total Contact Hours

Total Instructor Contact Hours:
62

Total Student Contact Hours:
62

Course Fee
50

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Departmental Exam, Skilled Demonstration, Licensure/certifications

Credit for Prior College Level Learning (CPCLL) Details
Skilled Demonstration Details

Skills-based assessment proficient score, assessment administered by the Computer Information Systems department faculty. Faculty will assess skills-based assessment based on evaluation rubric. Assessment information located in Department Office. Students must also complete a departmental exam and have proper licensure/certification.

Licensure/Certification

CompTia Linux+ Certification OR TestOut Linux Pro Certification OR another well-recognized, professional-level Linux industry certification

Licensure/Certification Details

CompTia Linux+ Certification OR TestOut Linux Pro Certification OR another well-recognized, professional-level Linux industry certification. Certification must be current and verified by department faculty. Verified certification, and the Credit for Prior College-Level Learning application will be signed, copied, and retained in the School of BEPD Office. Students must also complete a departmental exam and a skilled demonstration.

Goals, Topics, and Objectives

Core Course Topics

1. UNIX Operating System basics
2. UNIX File System
3. The VI editor
4. UNIX Boot Process
5. Exploring the shell
6. UNIX Communication
7. Shell Scripting

Describe the UNIX file system.

Demonstrate proficient use of the VI editor.

Discuss the different shells available.

Demonstrate proficient use of standard UNIX utilities such as sed, grep and awk.

Write and debug UNIX shell scripts.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Quizzes, Tests, Labs and Projects

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for CIS 129

CIS130 - C# Programming

Overview

Subject
Computer Information Systems

Academic Department
Computer Technology

School
Business, Entrepreneurshp, PD

Course Description
An intermediate programming course using C# for Windows application development. Covers coding and debugging techniques for an object oriented environment. Different Microsoft graphical user interface projects will be used such as Windows Forms, Windows Presentation Foundation (WPF), and ASP Web Forms.

Course Pre-requisite(s)
CIS125 Prin of Programming Logic or Instructor Permission

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
62

Total Student Contact Hours:
62

Course Fee
45

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Introduction to Visual Studio, the IDE environment
2. How to design a Graphical User Interface application
3. How to code and test a Windows applications
4. How to work with numeric and string data
5. How to code control structures
6. How to code methods and event handlers
7. How to handle exceptions and validate data
8. How to use arrays and collections
9. How to work with dates and strings
10. More skills for working with Windows ASP.NET web forms
11. How to debug an application
12. How to create and use classes

Modify the properties of an object using the Visual Studio design environment.

Create an application that will utilize the following controls: label, text box, button, list box, check box, radio button, image control, toolbar buttons, menu structure and a timer control.

Utilize variables with the correct data type and variable scope.

Design and code an application that will make use of the following C# statements: Assignment statement, Switch, IF, Do While, For loop.

Utilize Visual Studio Design Environment to create an application.

Evaluate a C# application that contains run-time errors utilizing the debug tools.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of academic achievement may include (but is not limited to) exams, quizzes, homework, and laboratory assignments

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for CIS 130

CIS141 - Introduction to Mobile Appl Development

Overview

Subject
Computer Information Systems

Academic Department
Computer Technology

School
Business, Entrepreneurshp, PD

Course Description
An introductory-level course covering application development for mobile and handheld devices. Emphasizes application programming principles, user experience and functionality considerations, and software architecture. Students will build and deploy basic mobile apps for a major mobile platform.

Course Pre-requisite(s)
CIS125 Prin of Programming Logic

Credit Hours
2

Total Contact Hours

Total Instructor Contact Hours:
32

Total Student Contact Hours:
32

Course Fee
45

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Mobile application operating systems
2. Technology and business trends impacting mobile applications.
3. Mobile application best practices.
4. Architecture of mobile applications.
5. Design and functionality of mobile applications.
6. Security issues in the mobile application environment.
7. Software engineering concepts in building mobile applications.

Identify popular versions of mobile application operating systems.

Explain the technology and business trends impacting mobile applications.

Identify mobile application best practices.

Describe the architecture of mobile applications.

Create and deploy basic mobile applications for a leading mobile application platform.

Critique the design and functionality of mobile applications.

Identify security issues in the mobile application environment.

Explain software engineering concepts in building mobile applications.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of academic achievement may include (but is not limited to) exams, quizzes, homework, and laboratory assignments.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for CIS 141

CIS147 - Hybrid Cloud I

Overview

Subject
Computer Information Systems

Academic Department
Computer Technology

School
Business, Entrepreneurshp, PD

Course Description
An introductory-level course that examines cloud, server and networking concepts. Covers on-premise Windows Server management and Azure Cloud integration in a Hybrid Cloud environment. Course helps students prepare for Microsoft Administrating Windows Server Hybrid Core Infrastructure industry certification.

Course Pre-requisite(s)
CNT110 CCNA: Networking I

Credit Hours
4

Total Contact Hours

Total Instructor Contact Hours:
62

Total Student Contact Hours:
62

Course Fee
75

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Licensure/certifications

Credit for Prior College Level Learning (CPCLL) Details
Licensure/Certification

Microsoft AZ-800: Administrating Windows Server Hybrid Core Infrastructure

Licensure/Certification Details

Certification must be current (within 3 years).

Goals, Topics, and Objectives

Core Course Topics

1. On-Premise Windows Server Installation and Configuration
2. Cloud and Azure
3. IP Address Management
4. Azure and On-Premise Active Directory
5. Manage Servers in Hybrid Environment
6. Azure and On-Premise Storage and File Services
7. Virtualization and Containers
8. On-Premise and Hybrid Network Connectivity

Install and configure on-premise Windows Server Operating System.

Create and deploy Cloud resources in Azure.

Configure IP Addresses, Domain Name Services and Dynamic Host Configuration Protocol services.

Install and configure both Azure and on-premise Active Directory services.

Manage both cloud and on-premise servers.

Configure and manage both Azure and on-premise storage and file services.

Create, deploy and manage server virtualization in both Azure and on-premise servers.

Establish and manage network connectivity between on-premise and Azure cloud resources.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Examinations and Lab Evaluations.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for CIS 147

CIS159 - A+ Technical Support

Overview

Subject
Computer Information Systems

Academic Department
Computer Technology

School
Business, Entrepreneurshp, PD

Course Description
Explores the hardware and software sections of the CompTIA A+ certification exam in detail. Covers installation, configuration, and troubleshooting of various hardware components. Also covers operating systems from a PC repair technician perspective and discusses how the operating system interacts with the PC's hardware, the boot process, troubleshooting, and interaction with application software. The student will engage in hands-on lab activities with actual hardware components, operating systems, and application installations.

Course Pre-requisite(s)
CIS100 Intro Info Tech

Course Co-requisite(s)
CIS100 Intro Info Tech can be taken previously or concurrently

Credit Hours
4

Total Contact Hours

Total Instructor Contact Hours:
92

Total Student Contact Hours:
92

Course Fee
50

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Departmental Exam, Skilled Demonstration, Licensure/certifications

Credit for Prior College Level Learning (CPCLL) Details
Minimum Departmental Exam Score

80

Departmental Exam Details

Skills-based assessment administered by the Computer Information Systems department faculty. Faculty will assess skills-based assessment based on evaluation rubric available in Department. Students must also complete a departmental exam and have proper licensure/certification.

Licensure/Certification

CompTIA A+ Certification

Licensure/Certification Details

CompTIA A+ Certification must be current. Department faculty will verify certification(s). Students must also complete a departmental exam and a skilled demonstration.

Goals, Topics, and Objectives

Core Course Topics

1. Working Inside the Computer
2. Power System, Motherboards, Processors, and Memory
3. Hard Drives, Storage, and I/O Devices
4. Networks and Printers
5. Troubleshooting Hardware Issues
6. Introducing Operating Systems and components.
7. Comparing Desktop and Mobile Operating Systems
8. Working with people in a technical world
9. Install, troubleshoot, maintain, and optimize an Operating System
10. Security and network essentials for the Operating System environment
11. Windows PowerShell Scripting

Identify, Install, configure, maintain, and upgrade hardware components

Troubleshoot and maintain hardware components

Assess storage problems and perform required steps to resolve issues.

Connect to both wired and wireless networks, and printers.

Assess hardware problems and perform required steps to resolve issues.

Describe the functions, structure, and major system files of various operating systems.

Identify, update and maintain the operating system on different types of devices.

Work with technicians both individually and as a team in a technical environment.

Recognize and interpret common error codes in both hardware and software environments and identify steps to correct the problems.

Identify and resolve operating system security threats.

Create PowerShell scripts and identify when to use and troubleshoot when the scripts error.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of academic achievement may include (but is not limited to) exams, quizzes, homework, and laboratory assignments.
Grading Scale
A-E

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for CIS 159

CIS167 - Cloud Computing

Overview

Subject
Computer Information Systems

Academic Department
Computer Technology

School
Business, Entrepreneurshp, PD

Course Description
An intermediate-level course that examines cloud computing topics, including cloud architecture and design, cloud security, operations and support, and cloud troubleshooting. Course helps students prepare for CompTIA's Cloud+ industry certification.

Course Pre-requisite(s)
CIS147 Hybrid Cloud I

Credit Hours
4

Total Contact Hours

Total Instructor Contact Hours:
62

Total Student Contact Hours:
62

Course Fee
75

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Licensure/certifications

Credit for Prior College Level Learning (CPCLL) Details
Licensure/Certification

CompTIA Cloud+

Licensure/Certification Details

Certification must be current (within 3 years).

Goals, Topics, and Objectives

Core Course Topics

1. Cloud Architecture and Design
2. Cloud Security
3. Deployment
4. Operations and Support
5. Cloud Troubleshooting

Explain the different cloud service models.

Use cloud security and assessment tools.

Provision cloud resources and networking solutions.

Implement cloud resource monitoring solutions.

Use troubleshooting methodologies to resolve cloud-related issues.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Examinations and Lab Evaluations.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for CIS 167

CIS170 - C Programming

Overview

Subject
Computer Information Systems

Academic Department
Computer Technology

School
Business, Entrepreneurshp, PD

Course Description
An intermediate-level course which familiarizes the student with the C programming language. Covers designing, coding, testing, and debugging programs. Emphasizes program and coding efficiency.

Course Pre-requisite(s)
CIS125 Prin of Programming Logic or MATH180 Calculus 1

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
62

Total Student Contact Hours:
62

Course Fee
45

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Organization of a Program
2. I/O Operations, Selection and Repetition
3. Data Types
4. Variable Declaration, Scope, and Storage Classes
5. Expressions and Assignments
6. User-Defined Functions and Library Functions
7. Arrays
8. Pointers and Addresses
9. Strings
10. Structures
11. Data Files
12. Data Validation

Design, write, compile and execute a C program

Identify the primitive data types in C.

Create a program to perform input/output (IO) operations.

Utilize selection statements.

Utilize loop statements.

Create, use and manipulate arrays.

Utilize user-defined and library functions.

Create, use and manipulate strings.

Evaluate and recognize when to use pointers.

Demonstrate the use of pointers.

Effectively apply variable scope in a program.

Demonstrate file input/output.

Create and use structures.

Use test data for program testing and input validation.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of academic achievement may include (but is not limited to) exams, quizzes, homework, and laboratory assignments.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for CIS 170

CIS171 - Java Programming

Overview

Subject
Computer Information Systems

Academic Department
Computer Technology

School
Business, Entrepreneurshp, PD

Course Description
An intermediate-level course which examines Java programming language and its various components. Emphasizes designing, coding, testing, and debugging programs using the Java language through laboratory exercises and detailed lectures.

Course Pre-requisite(s)
CIS170 C Programming or both CIS130 C# Programming and CIS172 JavaScript

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
62

Total Student Contact Hours:
62

Course Fee
45

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Portfolio Review, Licensure/certifications

Credit for Prior College Level Learning (CPCLL) Details
Portfolio Review Details

Student will present CIS Department with a portfolio of at least two years full-time Java development industry work experience related to the course learning outcomes as well as a valid certification in Java Development as described below. The portfolio will be evaluated using a rubric.

Licensure/Certification

Oracle Certified Associate or Professional in Java Development

Licensure/Certification Details

Student possess a recent (among the two most recent editions) Oracle Certified Associate or Professional in Java Development. Credential will be reviewed by CIS Department.

Goals, Topics, and Objectives

Core Course Topics

1. Creating a Java Class
2. Using Data - Constants, Variables, and GUI Input
3. Methods, Classes and Object Concepts
4. Decisions
5. Looping (while and for loops)
6. Characters, Strings and the StringBuilder
7. Arrays and Array Concepts
8. Inheritance Concepts
9. Exception Handling
10. File I/O
11. GUI Concepts (Swing and JavaFX)

Create variables with the correct data type and variable scope.

Create user-defined methods (functions).

Create classes and objects.

Explain Java's place in the internet and batch programming environments.

Demonstrate proficiency in the fundamental organization of a Java program.

Demonstrate proficiency in debugging.

Write a program to include file and record processing.

Demonstrate proficient use of Java to design and implement traditional as well as Graphical User Interface programs from user specifications.

Employ object-oriented programming concepts to design and implement complex and sophisticated application programs.

Employ event-driven programming concepts to design and implement complex and sophisticated application programs.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of academic achievement may include (but is not limited to) exams, quizzes, homework, and laboratory assignments.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for CIS 171

CIS172 - JavaScript

Overview

Subject
Computer Information Systems

Academic Department
Computer Technology

School
Business, Entrepreneurshp, PD

Course Description
An intermediate-level course which explores the JavaScript programming language and its various components. Emphasizes designing, coding, testing, and debugging programs using the JavaScript language through laboratory exercises and detailed lectures.

Course Pre-requisite(s)
CIS122 Web Internet Technologiesand CIS126 HTML/CSS Web Programming or Instructor Permission

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
62

Total Student Contact Hours:
62

Course Fee
45

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Introduction to JavaScript
2. Variables, Data Types, and Operators
3. Functions, Events, and Control Structures
4. Browser Object Model (BOM) and Document Object Model (DOM)
5. Validating Form Data
6. Object-Oriented JavaScript
7. JSON
8. Debugging and Error Handling
9. Managing State Information
10. AJAX
11. Libraries
12. Touchscreens and Mobile Devices
13. Secure Coding

Explain the scope and purpose of JavaScript.

Create practical JavaScripts that demonstrate the use of data types, operators, functions, events, control structures, strings, and arrays.

Manipulate the Browser Object Model (BOM) and Document Object Model (DOM) to access or manipulate elements, content properties, attributes, nodes, control windows, etc.

Calculate and validate data in HTML forms using browser-based and custom validation.

Demonstrate object-oriented programming in JavaScript using both built-in classes and custom classes.

Demonstrate the practical use of JSON.

Demonstrate debugging and error handling in JavaScript.

Explain how to maintain web page state information via client-side and server-side techniques

Implement AJAX in a web page to dynamically update web page content.

Utilize JavaScripts libraries for dynamic web page development, e.g. JQuery, Modernizr, etc.

Create JavaScripts that demonstrate programming for touchscreens and mobile devices, e.g. relevant events, APIs, testing tools, etc.

Explain JavaScript secure coding considerations and techniques.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of academic achievement may include (but is not limited to) exams, quizzes, homework, and laboratory assignments.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for CIS 172

CIS190 - Co-op in Computer Information Systems

Overview

Subject
Computer Information Systems

Academic Department
Computer Technology

School
Business, Entrepreneurshp, PD

Course Description
Cooperative education is a structured method of combining classroom-based education with practical work experience. A cooperative education experience, commonly known as a "co-op," provides academic credit for structured employment experience. Work experience must be directly related to the student's declared major to be eligible.To register for this course, a student must have completed 50% of core coursework, maintain an overall GPA of 2.0 and a program specific GPA of 2.5.

Course Pre-requisite(s)
Permission from Career Services Officer or Cooperative Education Officer

Credit Hours
1

Total Contact Hours

Total Instructor Contact Hours:
3

Total Student Contact Hours:
150

Academic Level
Undergraduate

Goals, Topics, and Objectives

Course Goals
Cooperative education helps students make the school-to-work transition, develop career and program-related learning objectives, and work on applicable skills for employment. Placements should provide students with the opportunity to apply and expand upon knowledge learned in the classroom, and develop the skills acquired in their coursework to align with the standards and expectations set by the worksite.

Core Course Topics

1. Professional Dress and Demeanor (attitude, posture, courteousness)
2. Workplace Communication
3. Interviewing Skills
4. Resume Building
5. Networking and Social Media
6. Seeking Employment
7. Career Advancement

1-3 program specific learning objectives will be developed by the instructor for each individual offering.

Students will create 1-3 learning objectives per credit to be approved by instructor for each individual offering.

Build a resume that meets standards of Career Services Officer.

Articulate the reasons for professional attire.

Wear professional attire while on the worksite, Attend career workshop in professional dress.

Display appropriate professional attitude and demeanor while on the worksite.

Interview effectively, Attend mock interview, give appropriate answers to five 5 questions.

Complete a written job application in a prompt, professional manner with all information legible, error-free, and thorough.

Display understanding of the appropriate use of Social Media sites (Facebook, LinkedIn, and Twitter) during Career Services workshop.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment will be determined by the instructor based on what is in the best interest of the student's academic growth, including future employability of the student. Assessment may include, but isn't limited to:

- Major final project
- Weekly journal
- Creation and attainment of all learning objectives
- Participation in a career-focused workshop
- Consistent and prompt attendance at worksite
- Employer evaluation

General Course Requirements and Recommendations
General Course Requirements and Recommendations A course syllabus will be developed by the instructor each semester the course is offered. The syllabus will include the standardized co-op Core-Career Focused Topics as well as Program-defined, Student-defined, and Career Services-defined learning objectives.

Texts
See Division for list of required texts

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for CIS 190

CIS211 - Web Server Administration

Overview

Subject
Computer Information Systems

Academic Department
Computer Technology

School
Business, Entrepreneurshp, PD

Course Description
Introduces the installation, configuration, and management of web server software. Offers hands-on experience in installing and administering server software platforms such as Apache Web Server. Covers web server security, performance monitoring and tuning, virtual hosting, and supporting database and dynamic content. Intended for network, server, or web administration; web development; or computer information system students.

Course Pre-requisite(s)
CIS129 Intro to UNIX Shell Script

Credit Hours
2

Total Contact Hours
Total Instructor Contact Hours:
32

Total Student Contact Hours:
32

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Operating system and server platform selection
2. HTTP protocol
3. Web server installation
4. Web server security
5. Virtual hosting
6. Dynamic content
7. Database connectivity
8. Web Server performance monitoring and tuning
9. Domain Name System (DNS)
10. Analytics and webmaster tools
11. Web server hosting options

Explain operating system and server platform selection factors.

Explain details of the HTTP protocol and how it works.

Install several of the industry dominant web servers.

Describe the various techniques available to secure a web server.

Configure virtual hosting.

Configure a web server with dynamic content and database connectivity.

Describe various techniques available to monitor and tune a web server.

Explain details of the Domain Name System (DNS) and how it works.

Setup web server analytics and webmaster tools.

Describe web server hosting options.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of academic achievement may include (but is not limited to) exams, quizzes, homework, and laboratory assignments.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for CIS 211

CIS221 - Instructional Tech Educators (Pre K-12)

Overview

Subject
Computer Information Systems

Academic Department
Computer Technology

School
Business, Entrepreneurshp, PD

Course Description
Covers basic computer literacy, including Microsoft Office, popular alternate productivity suites (e.g. Google Docs), use of the world-wide-web, and security, privacy, responsibility and ethics in a technological and online world. Also introduces future teachers to educational software, apps, devices, resources, and the pedagogy of technology integration. Includes the development of an electronic portfolio which demonstrate various ways of incorporating technology in the classroom environment. This course is designed as the first course in Instructional Technology for the early childhood and pre-education student and fulfills the HFC Institutional Outcome in Computer Technology.

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
75

Academic Level
Undergraduate

General Education Category
Computer Technology

Goals, Topics, and Objectives

Course Goals
This course addresses the standards for educator standards as defined by the International Society for Technology in Education (ISTE). Upon successful completion of this course, future teachers will be the following:

1. Learner
   - Educators continually improve their practice by learning from and with others and exploring proven and promising practices that leverage technology to improve student learning.
2. Leader
   - Educators seek out opportunities for leadership to support student empowerment and success and to improve teaching and learning.
3. Citizen
   - Educators inspire students to positively contribute to and responsibly participate in the digital world.
4. Collaborator
   - Educators dedicate time to collaborate with both colleagues and students to improve practice, discover and share resources and ideas, and solve problems.
5. Designer
   - Educators design authentic, learner-driven activities and environments that recognize and accommodate learner variability.
6. Facilitator
   - Educators facilitate learning with technology to support student achievement of the ISTE Standards for Students.
7. Analyst
   - Educators understand and use data to drive their instruction and support students in achieving their learning goals.

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Core Course Topics

1. Computer and technological devices
2. Operating systems and file/folder structure, organization and access
3. Use of classroom technology to enhance student learning and classroom management
4. Productivity software suites
5. Communication and collaboration
6. Development of digital age learning activities that facilitate and inspire student learning and creativity with appropriate assessments
7. Digital citizenship, responsibility, privacy and ethics, including copyright and fair use.
8. Multimedia and visual learning
9. American with Disabilities Act (ADA) and Special Needs
10. Professional growth and leadership

Operate basic computer/tablet/smartboard LCD hardware, including input, output, and storage devices.

Perform file management tasks, including finding, organizing, saving, copying, and printing files.

Use basic word processing functions to prepare documents that incorporate a variety of formatting options.

Locate information on the Internet, identify appropriate search terms, download files, and use a search engine effectively.

Prepare a spreadsheet that would be used in an educational setting and incorporate basic formulas and a variety of formatting options.

Create and view a slideshow using basic presentation software functions.

Create lesson plans and rubrics that demonstrate effective technology integration into the pre-K through grade 12 classroom based on established pedagogical approaches.

Use technology to demonstrate effective teacher-to-the-student, and teacher-to-parent, and student-to-student communication and collaboration e.g. send/open e-mail and attachments, eportfolio, web site/blog, social media, messaging, learning management systems (LMS), classroom management platforms.

Identify issues and recommendations related to computer/technology ethics, responsibility and netiquette.

Recognize common threats to computer security, malware, and privacy, such as viruses, phishing, and identity theft; and identify methods of prevention.

Create and host a multimedia video.

Utilize technology to design and create visual diagrams/mind maps.

Create and host a web site.

Create an educational portfolio.

Explain the importance of the American with Disabilities Act (ADA) and accommodations for students with special needs in education and computer/technological considerations related to it.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of academic achievement will include, but is not limited to, quizzes, projects, construction of a web site, and an electronic portfolio of course work and artifacts demonstrating computer and technological literacy and pedagogically-based integration of technology in the pre-K through grade 12 classroom and environment.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for CIS 221

CIS222 - Web Database Development with PHP

Overview

Subject
Computer Information Systems

Academic Department
Computer Technology

School
Business, Entrepreneurshp, PD

Course Description
An intermediate-level course in which a database-backed web site using PHP and SQL is developed. Also covers HTML, CSS, PHP, database design, JSON, Git, and security.

Course Pre-requisite(s)
CIS122 Web Internet Technologies

Credit Hours
4

Total Contact Hours
Total Instructor Contact Hours:
62

Total Student Contact Hours:
62

Course Fee
45

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. HTML, CSS, and PHP
2. Modular Programming
3. PHP Programming Control Structures Models
4. PHP Arrays
5. PHP Functions
6. JSON Data Sets
7. Database-backed Web Sites
8. Version Control Software

Integrate HTML, CSS, and PHP to develop interactive web applications.

Demonstrate modular programming design with PHP.

Demonstrate effective use of programming control structures in PHP, e.g. loops, decision statements, etc.

Demonstrate effective use of arrays in PHP.

Demonstrate effective use of functions in PHP.

Demonstrate effective use of objects in PHP.

Develop PHP pages that interact with JSON data sets.

Design and create a database-backed website in PHP and MySQL.

Develop database queries to search, insert, update and delete data and structure in a MySQL database.

Identify appropriate programming practices and standards for secure web and database applications.

Use Git to to commit, push, pull, and further manipulate version controls on software.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of academic achievement may include (but is not limited to) exams, quizzes, homework, and laboratory assignments.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for CIS 222

CIS225 - Web Frameworks

Overview

Subject
Computer Information Systems

Academic Department
Computer Technology

School
Business, Entrepreneurshp, PD

Course Description
An advanced-level course covering client- and server-side web development frameworks. Web frameworks will be used to create both dynamic front-end user-interfaces and web applications. Popular web frameworks will be used, e.g. Bootstrap, AngularJS, Ember, Django.

Course Pre-requisite(s)
CIS111 SQL for Database Development and CIS122 Web Internet Technologies and CIS172 JavaScript

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
62

Total Student Contact Hours:
62

Course Fee
45

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Popular Web Framework and Languages
2. Client-Side Web Frameworks
3. Server-Side Web Frameworks
4. Cross-Platform Development
5. Application Programming Interfaces (APIs)

Identify the industrys most popular client-side and server-side web frameworks and the programming languages used in each.

Describe how client-side web framework are used to speed up development time and create cross-platform, accessible, responsive, and dynamic user-interfaces and web sites.

Describe how server-side web frameworks are used to speed up development time and create dynamic web sites and applications.

Use a client-side web framework to create a web page/site.

Use a server-side web framework (web application framework) to create a web page/site.

Demonstrate the use of web frameworks to create cross-platform web sites, e.g. desktops, mobile devices, etc.

Utilize an Application Programming Interface (API) to add functionality to a web page.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of academic achievement may include (but is not limited to) exams, quizzes, homework, and laboratory assignments.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for CIS 225

CIS227 - Content Management Systems

Overview

Subject
Computer Information Systems

Academic Department
Computer Technology

School
Business, Entrepreneurshp, PD

Course Description
Covers the installation, configuration and publishing of a several industry leading Content Management Systems (CMS). Additional topics include: templates, information architecture concepts, content management, widgets, use of HTML and CSS, user management, logins, usability, page design, backend database administration, modules/plug-ins, security, and web project management.

Course Pre-requisite(s)
CIS126 HTML/CSS Web Programming and ART107 Photoshop

Credit Hours
4

Total Contact Hours

Total Instructor Contact Hours:
62

Total Student Contact Hours:
62

Course Fee
45

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Web site development process
2. Web page design, layout, and structure
3. Web site implementation
4. Web site functionality
   a. Web pages
   b. HTML tags
   c. CSS
5. Web Authoring Software/Editor/Content Management Systems (CMS)
6. Interactive and multimedia elements
7. Web site development and maintenance efficiency
8. Web page standards
   a. HTML and CSS W3C Validation
   b. Cross-browser testing
   c. Accessibility testing
9. Dynamic web programming

Explain the entire web site development process from beginning to end.

Create effective web site designs considering users, layout, color, fonts, and navigation.

Perform web site design activities including site hierarchy diagrams, wire frames, and storyboards.

Explain web site implementation factors, including domain name acquisition, hosting, usability, testing, launch, and maintenance.

Execute the following actions within a web authoring software/editor/Content Management System (CMS): Create a new web site with pages logically organized within it.

Execute the following actions within a web authoring software/editor/Content Management System (CMS): Incorporate various HTML tags within web pages, e.g. images, hyperlinks, tables, forms.

Execute the following actions within a web authoring software/editor/Content Management System (CMS): Utilize inline, embedded and external CSS.

Create interactive, multimedia web pages by inserting elements, e.g. sound, video, streaming multimedia, Adobe Flash, JavaScript/JQuery, Spry.

Incorporate plug-ins and social media into a web site.

Demonstrate various techniques to improve the efficiency of building and maintaining a web site such as templates, external CSS, snippets, library items and Content Management System (CMS) Themes and Modules.

Perform activities that ensure web pages are industry standards compliant, such as HTML and CSS W3C page validation, cross-browser testing, and accessibility testing.

Explain the use of databases and dynamic web programming languages in web sites.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of academic achievement may include (but is not limited to) exams, quizzes, homework, laboratory assignments, and the creation of a web presence.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for CIS 227

CIS229 - UNIX System Administration

Overview

Subject
Computer Information Systems

Academic Department
Computer Technology

School
Business, Entrepreneurshp, PD

Course Description
Covers the effective administration of a UNIX/Linux system and the knowledge and tasks required of the Linux+ certification exams. Discusses the architecture and internals of the UNIX and Linux Operating Systems along with laboratory exercises that include the installation and package management, device management, Linux file systems, files system hierarchy standards, shell scripting, user interfaces and desktops, administrative tasks, essential system services, networking fundamentals, and security.

Course Pre-requisite(s)
CIS129 Intro to UNIX Shell Script

Credit Hours
4

Total Contact Hours
Total Instructor Contact Hours:
62

Total Student Contact Hours:
62

Course Fee
50

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Departmental Exam, Skilled Demonstration, Licensure/certifications

Credit for Prior College Level Learning (CPCLL) Details
Skilled Demonstration Details

Skills-based assessment proficient score, assessment administered by the Computer Information Systems department faculty. Faculty will assess skills-based assessment based on evaluation rubric. Assessment information located in Department Office. Students must also complete a departmental exam and have proper licensure/certification.

Licensure/Certification

CompTia Linux+ Certification OR TestOut Linux Pro Certification OR another well-recognized, professional-level Linux industry certification

Licensure/Certification Details

CompTia Linux+ Certification OR TestOut Linux Pro Certification OR another well-recognized, professional-level Linux industry certification. Certification must be current and verified by department faculty. Verified certification, and the Credit for Prior College-Level Learning application will be signed, copied, and retained in the School of BEPD Office. Students must also complete a departmental exam and a skilled demonstration.

Goals, Topics, and Objectives

Core Course Topics

1. Overview of Unix/Linux, system planning, installation, and the Administrator role
2. Operating System security
3. UNIX and Linux File Systems: Command and Graphical Interfaces
4. UNIX Editors: Text and Graphical
5. Advanced system administration tasks
6. Hardware and system resources management
7. Logs and configuration files
8. Unix/Linux scripts and other automated procedures
9. Network connections
10. Backup

Identify features of the System Administrators job.
Plan a UNIX system based on user requirements and industry standards.
Install a Linux Operating System.
Define and apply file security concepts in a UNIX or Linux system.
Define and apply user and group security methods to a network.
Demonstrate proficient use of system utilities and shell scripts.
Develop and perform server penetration tests.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Quizzes, Tests, Labs and Projects

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for CIS 229

CIS230 - C++ Programming

Overview

Subject
Computer Information Systems

Academic Department
Computer Technology

School
Business, Entrepreneurshp, PD

Course Description
An advanced-level course expanding upon arrays, pointers, structures, templates, and file I/O. Test Driven Development (TDD), refactoring, and UML diagrams concepts are applied. Covers theory and application in areas such as the standard template libraries including vectors, lists, stacks, queues, sets, and maps. Object oriented principles of classes, data, inheritance and dynamic binding are covered.

Course Pre-requisite(s)
CIS170 C Programming

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
62

Total Student Contact Hours:
62

Course Fee
45

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. C++ Basics
2. Functions
3. Parameters and Overloading
4. Arrays
5. Structures and Classes
6. Constructors
7. TDD (Test Driven Development) and Refactoring
8. UML Diagrams
9. Operator Overloading, friends, and references
10. Strings
11. Pointers and Dynamic Arrays
12. Inheritance
13. STL's (vectors, lists, stacks, queues, sets, and maps) and Iterators
14. Polymorphism

Input, compile and execute a C++ program using basic programming concepts.
Design and create a program using functions.
Create a program using separate compilation, prototypes and header files.
Demonstrate the use of structures.
Code, manipulate and utilize character strings.
Demonstrate proficient use of linear and multidimensional arrays.
Declare, initialize and manipulate pointers.
Create and use references.
Develop a program using TDD.
Demonstrate refactoring.
Develop programs from UML diagrams.
Demonstrate proficient use of operator overloading.
Demonstrate proficient use of arrays of pointers.
Design and create a program using function pointers.
Design and create classes, subclasses and objects.
Explain and demonstrate the use of STLs (vectors, lists, stacks, queues, sets, and maps) and iterators.
Demonstrate proficient use of exception handling.

Demonstrate proficient use of Constructor and destructor functions.

Demonstrate proficient use of friend classes and functions.

Create and use the NEW and DELETE operators.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of academic achievement may include (but is not limited to) written exams, hands-on activities and programs.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for CIS 230

CIS232 - Advanced C# Database Programming

Overview

Subject
Computer Information Systems

Academic Department
Computer Technology

School
Business, Entrepreneurshp, PD

Course Description
An advanced-level course focusing on writing Windows applications that interface with a database management system using the C# language. Covers using data sources for Rapid Application Development and structuring a three-tier application architecture.

Course Pre-requisite(s)
CIS111 SQL for Database Development & CIS130 C# Programming

Credit Hours
4

Total Contact Hours
Total Instructor Contact Hours:
62

Total Student Contact Hours:
62

Course Fee
45

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics
1. How to work indexers, delegates, events, and operators.
2. How to work with inheritance, interfaces and generics
3. How to work with data sources and datasets
4. How to work with bound controls and parameterized queries
5. How to write your own data access code
6. How to work with LINQ

Compose a Windows application using data sources.

Design and code a Windows application using bound controls and parameterized queries.

Develop business and database classes that utilize property procedures, methods, indexers, delegates, events, inheritance and polymorphism.

Design, code and test a Windows application using the reporting features of Visual Studio.

Develop a Windows application using the LINQ language.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Written exams and hands-on lab activities

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for CIS 232

CIS241 - Advancd Mobile App Developmnt (Android)

Overview

Subject
Computer Information Systems

Academic Department
Computer Technology

School
Business, Entrepreneurshp, PD

Course Description
An advanced-level course expanding on mobile application development on the Android platform. Covers data handling and connectivity to back-end services including those hosted in a cloud environment. Design approaches to efficiently reach a large segment in the mobile market will be covered.

Course Pre-requisite(s)
CIS141 Intro to Mobile App Developmen with either CIS130 C# Programming or CIS170 C Programming, or just CIS171 Java Programming or CIS230 C++ Programming

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
45

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics
1. Cross-platform development tools.
2. Mobile applications using an application development framework.
3. Rapid prototyping techniques for mobile interfaces.
4. Marketing for mobile applications.
5. Social networking software integration.
6. Mobile application security.
7. GEO positioning, accelerometer, and rich gesture based UI handling.
8. Software engineering for mobile applications.

Describe the enterprise scale requirements of mobile applications.

Design and develop mobile applications using an application development framework.

Utilize rapid prototyping techniques to design and develop sophisticated mobile interfaces.

Compare and contrast browser-based approaches, cross-platform development tools, and hybrid approaches that take advantage of underlying phone functionality.

Explain GEO positioning, accelerometer, and rich gesture based UI handling.

Promote mobile applications in the market, including social networking software integration.

Demonstrate mobile application security concepts.

Implement software engineering concepts in building mobile applications.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of academic achievement may include (but is not limited to) exams, quizzes, homework, and laboratory assignments.

Texts
See course syllabus

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for CIS 241

CIS242 - Voice Over IP (VoIP)

Overview

Subject
Computer Information Systems

Academic Department
Computer Technology

School
Business, Entrepreneurshp, PD

Course Description
An intermediate level course that covers VoIP basics, CODECs, Session Initiation Protocol (SIP), Quality of Service (QoS) and the integration of voice into existing TCP/IP data networks. Students also configure a Digital PBX system with a Dial Plan that includes direct inward dial (DID) lines, extensions, queues, Integrated Voice Response (IVRs), routes and trunks through laboratory exercises.

Course Pre-requisite(s)
CIS112 Intro to Networking or CNT110 CCNA: Networking I

Credit Hours
2

Total Contact Hours
Total Instructor Contact Hours:
32

Total Student Contact Hours:
32

Course Fee
50

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. IP Telephony concepts
2. Introduction of voice protocols
3. Components of Voice over IP system
4. How TCP/IP integrates Voice
5. QoS Issues
6. Introduction to SIP
7. Configuration of a VoIP System
8. Troubleshooting common VoIP issues

Identify basic IP Telephony concepts.

Summarize QoS issues.

Discuss the steps to digitized voice via CODECs.

Explain how TCP/IP and SIP move voice across a network.

Configuration of a VoIP PBX System.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Exams, Homework, and Laboratory Assignments

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for CIS 242

CIS243 - Advanced Mobile App Development (iOS)

Overview

Subject
Computer Information Systems

Academic Department
Computer Technology

School
Business, Entrepreneurshp, PD

Course Description
An advanced-level course expanding on mobile application development on the iOS platform. Covers data handling and connectivity to back-end services including those hosted in a cloud environment. Design approaches to efficiently reach a large segment in the mobile market will be covered.

Course Pre-requisite(s)
CIS141 Intro to Mobile App Developmen with either CIS130 C# Programming or CIS170 C Programming, or just CIS171 Java Programming or CIS230 C++ Programming

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
45

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Portfolio Review, Licensure/certifications

Credit for Prior College Level Learning (CPCLL) Details
Portfolio Review Details

Student will present CIS Department with a portfolio of at least two years full-time mobile IOS application development industry work experience related to the course learning outcomes as well as a valid certification in Java Development as described below. The portfolio will be evaluated using a rubric.

Licensure/Certification

App Development with Swift Certified User certification

Licensure/Certification Details

Student possess a recent Apple App Development with Swift Certified User certification. Credential will be reviewed by CIS Department.

Goals, Topics, and Objectives

Core Course Topics

1. Cross-platform development tools.
2. Mobile applications using an application development framework.
3. Rapid prototyping techniques for mobile interfaces.
4. Marketing for mobile applications.
5. Social networking software integration.
6. Mobile application security.
7. GEO positioning, accelerometer, and rich gesture based UI handling.
8. Software engineering for mobile applications.

Describe the enterprise scale requirements of mobile applications.

Design and develop mobile applications using an application development framework.

Utilize rapid prototyping techniques to design and develop sophisticated mobile interfaces.

Compare and contrast browser-based approaches, cross-platform development tools, and hybrid approaches that take advantage of underlying phone functionality.

Explain GEO positioning, accelerometer, and rich gesture based UI handling.

Promote mobile applications in the market, including social networking software integration.

Demonstrate mobile application security concepts.

Implement software engineering concepts in building mobile applications.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of academic achievement may include (but is not limited to) exams, quizzes, homework, and laboratory assignments.

Texts
See course syllabus

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for CIS 243

CIS247 - Hybrid Cloud II

Overview

Subject
Computer Information Systems

Academic Department
Computer Technology

School
Business, Entrepreneurshp, PD

Course Description
An advanced course covering Azure Hybrid Cloud Infrastructure and the configuration of advanced storage solutions such as Network Attached Storage (NAS) devices and Storage Area Networks (SAN). Emphasizes server and infrastructure security, fault-tolerant infrastructure in cloud computing, load balancing and fail-over clusters, disaster recovery, server and workload migration, and cloud and on-premise resource monitoring and troubleshooting. Course helps prepare students for Microsoft Windows Server Hybrid Administrator industry certification.

Course Pre-requisite(s)
CIS147 Hybrid Cloud I

Credit Hours
4

Total Contact Hours

Total Instructor Contact Hours:
62

Total Student Contact Hours:
62

Course Fee
75

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Licensure/certifications

Credit for Prior College Level Learning (CPCLL) Details
Licensure/Certification

Microsoft AZ-801 - Windows Server Hybrid Administrator

Licensure/Certification Details

Certification must be current (within 3 years).

Goals, Topics, and Objectives

Core Course Topics

1. Secure Windows Servers
2. Azure and On-Premise Active Directory and Group Policy Security
3. Secure Azure and On-Premise Networking and Storage
4. Clustering and High Availability
5. Disaster Recovery
6. Migrate Servers and Workloads
7. Monitor and Troubleshoot Azure and On-Premise Resources

Implement and manage Windows Defender resources.

Implement and manage Azure and on-premise Active Directory security.

Implement and manage Azure and on-premise security

Create and manage Network Load Balancing and High Availability Clusters.

Perform Azure and on-premise Disaster Recovery.

Manage migration of services between Azure and on-premise servers.

Manage and troubleshoot Azure and on-premise Servers and workloads.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Examinations and Lab Evaluations.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for CIS 247

CIS270 - Oracle Database Administration

Overview

Subject
Computer Information Systems

Academic Department
Computer Technology

School
Business, Entrepreneurshp, PD

Course Description
An advanced-level course familiarizing the student with the Oracle Database Management System covering database terminology, data structure design, data retrieval, and manipulation. Includes database server installation, configuration, Oracle components and architecture, user administration and security, performance monitoring, client application access, and backup and recovery through laboratory exercises.

Course Pre-requisite(s)
CIS111 SQL for Database Development or Instructor Permission

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
62

Total Student Contact Hours:
62

Course Fee
45

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Licensure/certifications

Credit for Prior College Level Learning (CPCLL) Details
Licensure/Certification

Current Oracle Certified Associate (OCA) in Oracle Database Administration

Licensure/Certification Details

Student possess a recent (among the two most recent editions) Oracle Certified Associate (OCA) certifications in Oracle Database Administration. Credential will be reviewed by CIS Department.

Goals, Topics, and Objectives

Core Course Topics

1. Introduction to database management systems
2. The Database Administrator (DBA)
3. Planning and designing a database
4. Oracle installation and upgrade
5. Oracle architecture and components
6. Database security
7. Database monitoring and tuning
8. Oracle and third-party database administration software and tools
9. Client/server connectivity
10. Database backup and recovery

Differentiate a personal database from a large-scale enterprise database.

Describe the role of a Database Administrator (DBA).

Describe planning and design aspects to a database.

Install and upgrade an Oracle instance.

Configure an Oracle instance.

Describe the Oracle architecture and its various components.

Implement database security methods such as Perform user, roles, privileges, and profiles.

Monitor and tune database performance based on usage.

Perform database administration tasks using Oracle and third-party software and tools.

Configure client access to the server, e.g. windows, web, application.

Implement the appropriate database backup and recovery strategies based on organizational needs.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of academic achievement may include (but is not limited to) exams, quizzes, homework, and laboratory assignments.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for CIS 270

CIS271 - Advanced Java

Overview

Subject
Computer Information Systems

Academic Department
Computer Technology

School
Business, Entrepreneurshp, PD

Course Description
An advanced-level course which examines advanced Java features including advanced graphical user interfaces (GUI), data structures, file I/O, database connectivity, multithreading, generics, recursion, efficiency of algorithms, Java Server Pages (JSP), and Java Frameworks.

Course Pre-requisite(s)
CIS171 Java Programming

Credit Hours
4

Total Contact Hours

Total Instructor Contact Hours:
62

Total Student Contact Hours:
62

Course Fee
39

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Portfolio Review, Licensure/certifications

Credit for Prior College Level Learning (CPCLL) Details
Portfolio Review Details

Student will present CIS Department with a portfolio of at least two years full-time Java development industry work experience related to the course learning outcomes as well as a valid certification in Java Development as described below. The portfolio will be evaluated using a rubric.

Licensure/Certification

Oracle Certified Professional in Java Development

Licensure/Certification Details

Student possess a recent (among the two most recent editions) Oracle Certified Professional certification in Java Development. Credential will be reviewed by CIS Department.

Goals, Topics, and Objectives

Core Course Topics

1. Advanced Graphical User Interfaces (GUI), e.g. Swing, JavaFX
2. Data Structures (Lists, stacks, queues, hashmaps, treemaps)
3. File I/O
4. Database Connectivity
5. Efficiency of Algorithms
6. Java Server Pages (JSP)
7. Multithreading
8. Generics
9. Recursion
10. Java Frameworks
11. Test Driven Development

Explain the difference between Swing and JavaFX.
Create GUI applications using advanced techniques such as anonymous classes and lambda expressions.
Create data structures.
Perform file input/output (I/O).
Access a database using Java.
Explain Big-O notation and how to determine the efficiency of an algorithm.
Create a dynamic web (HTTP) page using a Java Server Page.
Explain when to use multithreading.
Create a multithreaded program.
Implement Java Generics.
Create Java methods using recursion.
Describe various Java frameworks, such as Struts, Spring/MVC, and JSF.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of academic achievement may include (but is not limited to) exams, quizzes, homework, and laboratory assignments.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for CIS 271

CIS272 - Project Management

Overview

Subject
Computer Information Systems

Academic Department
Computer Technology

School
Business, Entrepreneurshp, PD

Course Description
An advanced-level course which studies project management techniques that provide a foundation for the CompTIA IT Project+ certification and Project Management Body of Knowledge (PMBOK). Also covers project integration, scope, time, cost, quality, human resources, communications, risk, and procurement management. Utilizes Microsoft Project software to manage a project.

Course Pre-requisite(s)
CIS100 Intro Info Tech

Credit Hours
4

Total Contact Hours
Total Instructor Contact Hours:
62

Total Student Contact Hours:
62

Course Fee
45

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Licensure/certifications

Credit for Prior College Level Learning (CPCLL) Details

Licensure/Certification Details

Current Project Management Professional (PMP) certification or Certified Associate in Project Management (CAPM) certification.

Goals, Topics, and Objectives

Core Course Topics

1. Project Management in Information Technology Context
2. Business Case
3. Integration Management
4. Scope Management
5. TIme Management
6. Cost Management
7. Quality Management
8. Human Resource Management
9. Communications Management
10. Risk Management
11. Procurement Management
12. Microsoft Project Software

Create a project charter.

Develop a business case that includes a requirements document.

Describe project management integration.

Identify stakeholders and define customer expectations.

Define project scope and work breakdown structure.

Develop a project schedule.

Develop cost estimates.

Describe methodologies for quality assurance.

Develop a human resource plan.

Develop a communication plan.

Perform risk assessment and mitigation.

Develop a procurement management plan.

Utilize Microsoft Project software to manage a project.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of academic achievement may include (but is not limited to) exams, quizzes, homework, and laboratory assignments.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for CIS 272

CIS276 - Digital Forensics

Overview

Subject
Computer Information Systems

Academic Department
Computer Technology

School
Business, Entrepreneurshp, PD

Course Description
Examine the fundamental principles, theory and application of computer investigations, computer forensics tools, information protection, professional development and cybersecurity. Explores various types of cybercrime and investigative techniques. Students will discuss emerging technologies used in law enforcement in relation to computer-related crimes scenes, evidence collection and analysis. Students will evaluate and synthesize technical and legal issues in relation to digital evidence. Students will apply various skills and techniques, combined with numerous investigative software tools to analyze seized electronic media. Students subject to background investigation prior to admittance.

Course Pre-requisite(s)
CIS100 Intro Info Tech, with a grade of "C" or better.

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
62

Total Student Contact Hours:
62

Course Fee
50

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. What is Computer Forensics?
2. Investigating Cyber Crime
3. Legal Issues Relating to Cyber Crime Investigation
4. The Role of Law Enforcement and the Courts Regarding Computer Forensics
5. Social, Legal and Technological Aspects in Computer Forensics
6. Computer Forensics Reporting
7. Digital Forensics Profession and Investigations
8. Data Acquisition
9. Windows, Linux and Macintosh File Systems
10. Digital Forensic Tools
11. Email and Social Media Investigation
12. Mobile Device Forensics

Explain the field of digital forensics.

Restate limitations on expectation of privacy.

Identify and discuss the categories of computer crimes and what constitutes a cybercrime.

Summarize how to prepare a digital forensic investigation using a systematic approach.

Describe how to prepare a digital forensic investigation for the public and private sector.

Restate how to conduct an investigation including critiquing a case.

Describe types of fraud and investigative techniques.

Describe certification and physical requirements for digital forensic labs.

Discuss data acquisition methods, tools and validation.

Explain acceptable methods for searching and analyzing evidence.

Explain guidelines for processing law enforcement crime scenes (digital evidence storage and hashes).

Differentiate Windows, MacOS and Linux file system structures.

Use digital forensic software and hardware tools.

Define digital graphics and audio file formats.

Apply procedure of a live acquisition, analysis of virtual machines, network forensics and network monitoring tools.

Summarize email and social media investigations.

Summarize mobile device and cloud forensics.

Describe guidelines for report writing for high-tech investigations.

Demonstrate the responsible, ethical, and professional behavior required for expert witness testimony.Summarize the rules of evidence and legal foundations.

Summarize courtroom procedures and effective testimony.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Students will be assessed through tests, quizzes, in-class activities/presentations, case studies, outside assignments, and/or class participation.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for CIS 276

CIS280 - Information Assurance and Security

Overview

Subject
Computer Information Systems

Academic Department
Computer Technology

School
Business, Entrepreneurshp, PD

Course Description
An intermediate-level course that provides a comprehensive understanding of Information Assurance and Security as defined in the National Training Standard for Information Systems Security Professionals. Emphasizes Information Assurance Skills that are necessary to address government and industry security needs.

Course Pre-requisite(s)
CIS129 Intro to UNIX Shell Script & either CNT110 CCNA: Networking I or CIS112 Intro to Networking

Credit Hours
4

Total Contact Hours
Total Instructor Contact Hours:
62

Total Student Contact Hours:
62

Course Fee
45

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Information Security
2. Need for Security
3. Legal, Ethical, and Professional Issues in Information Security
4. Risk Management
5. Planning for Security
6. Security Technology: Firewalls and VPNs
7. Intrusion Detection and Prevention Systems and other security tools
8. Cryptography
9. Physical Security
10. Implementing Information Security
11. Security and Personnel
12. Information Security Maintenance

Demonstrate foundation knowledge of information security/assurance within the organization

Demonstrate knowledge of the profession, its organizations, goals and leadership roles, literature/publications, issues and research foundations.

Demonstrate knowledge of the foundations of information security including legal, regulatory and policy issues, understanding general threats against information systems including denial of service, spoofing and hijacking.*

Identify, analyze and manage viruses, worms, Trojan horses, Rootkits, Botnets, Spyware, Adware, logic bombs and Advanced Persistent Threats (APT)*

Demonstrate knowledge of security objectives and policy development.*

Demonstrate knowledge of cryptography and public key infrastructure (PKI)*

Assess and demonstrate knowledge of target hardening of network devices, operating systems and applications.*

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of student performance will be determined by written tests, research papers, PowerPoint presentations, and hands-on lab activities.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for CIS 280

CIS290 - Co-op in Computer Information Systems

Overview

Subject
Computer Information Systems

Academic Department
Computer Technology

School
Business, Entrepreneurshp, PD

Course Description
Cooperative education is a structured method of combining classroom-based education with practical work experience. A cooperative education experience, commonly known as a "co-op," provides academic credit for structured employment experience. Work experience must be directly related to the student's declared major to be eligible.To register for this course, a student must have completed 50% of core coursework, maintain an overall GPA of 2.0 and a program specific GPA of 2.5

Course Pre-requisite(s)
Permission from Career Services Officer or Cooperative Education Officer

Credit Hours
2

Total Contact Hours

Total Instructor Contact Hours:
3

Total Student Contact Hours:
150

Academic Level
Undergraduate

Goals, Topics, and Objectives

Course Goals
Cooperative education helps students make the school-to-work transition, develop career and program-related learning objectives, and work on applicable skills for employment. Placements should provide students with the opportunity to apply and expand upon knowledge learned in the classroom, and develop the skills acquired in their coursework to align with the standards and expectations set by the worksite.

Core Course Topics

1. Professional Dress and Demeanor (attitude, posture, courteousness)
2. Workplace Communication
3. Interviewing Skills
4. Resume Building
5. Networking and Social Media
6. Seeking Employment
7. Career Advancement

1-3 program specific learning objectives will be developed by the instructor for each individual offering.
Students will create 1-3 learning objectives per credit to be approved by instructor for each individual offering.
Build a resume that meets standards of Career Services Officer.
Articulate the reasons for professional attire.
Wear professional attire while on the worksite.
Attend career workshop in professional dress.
Career Services-defined Display appropriate professional attitude and demeanor while on the worksite.
Interview effectively.
Career Services-defined Attend mock interview, give appropriate answers to five 5 questions
Complete a written job application in a prompt, professional manner with all information legible, error-free, and thorough.
Display understanding of the appropriate use of Social Media sites (Facebook, LinkedIn, and Twitter) during Career Services workshop.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment will be determined by the instructor based on what is in the best interest of the student's academic growth, including future employability of the student. Assessment may include, but isn't limited to:

- Major final project
- Weekly journal
- Creation and attainment of all learning objectives
- Participation in a career-focused workshop
- Consistent and prompt attendance at worksite
- Employer evaluation

General Course Requirements and Recommendations
General Course Requirements and Recommendations A course syllabus will be developed by the instructor each semester the course is offered. The syllabus will include the standardized co-op Core-Career Focused Topics as well as Program-defined, Student-defined, and Career Services-defined learning objectives.

Texts
See Division for list of required texts

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for CIS 290

CIS294 - Software Engineering

Overview

Subject
Computer Information Systems

Academic Department
Computer Technology

School
Business, Entrepreneurshp, PD

Course Description
A capstone course involving the study and application of software engineering principles to design and develop software. Emphasizes written and oral communication skills necessary for the information technology professional through participation in a software project designed to reinforce course material.

Course Pre-requisite(s)
CIS111 SQL for Database Development, CIS122 Web Internet Technologies, and one of the following: CIS130 C# Programming, CIS230 C++ Programming, CIS171 Java Programming, or CIS222 Web Database Dev with PHP

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
45

Academic Level
Undergraduate

General Education Category
English Composition or Communications

Michigan Transfer Agreement (MTA) Category
Category 2: English Composition or Communications - Applied Degrees

Goals, Topics, and Objectives

Core Course Topics
1. Software development and design methodologies
2. Process models
3. Requirements engineering
4. Data and object models
5. Diagramming using various UML diagrams, and data flow diagrams, entity relationship diagrams
6. Software development and collaboration tools (version control, diagramming, communication, Kanban method)
7. API development and integration.
8. User interface design
9. Software testing and quality
10. Presentation principles
11. Security analysis and planning
12. Software development, integration, and implementation
13. Collaboration and team communication

Describe software development and design methodologies.

Create software using traditional process models and agile processes.

Conduct requirements analysis and create a system requirement specification.

Develop use cases.

Create data and object models

Diagram using various UML diagrams, and data flow diagrams, entity relationship diagrams.

Use software development and collaboration tools using version control software, diagramming software, communication software, and Kanban software.

Integrate APIs into a software application.

Create accessible and professional user interfaces.

Develop, integrate, and implement a multifaceted software application as a team.

Communicate with team members and other teams to collaborate and resolve conflicts.

Participate in code reviews and refactoring.

Conduct unit, integration, and validation testing.

Analyze security concerns.

Develop a system disaster recovery and back up plan.

Create Data Flow Diagrams, Entity-Relationship Diagrams.

Create and give a professional presentation.

Analyze and evaluate information in order to identify the need for research to draw conclusions, formulate inferences, solve problems and make decisions in the context of Computer Information Systems.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Written assignments and tests, oral presentations, and a group project requiring the selection, evaluation, use, and documentation of appropriate research material from external sources.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for CIS 294

CIS295 - Network Design and Implementation

Overview

Subject
Computer Information Systems

Academic Department
Computer Technology

School
Business, Entrepreneurshp, PD

Course Description
A capstone course covering the design, implementation, and support of a Local Area Network (LAN). Examines basic LAN design methods and tools, Network Operating Systems, LAN implementation considerations, LAN hardware, and network troubleshooting techniques. Includes the design and implementation of a LAN in a lab setting complete with file servers, system backups, wireless and wired clients, printing, Internet Access, configuration of switches, VLANs, routers, VPNs, and firewalls.

Course Pre-requisite(s)
CNT220 CCNA: Networking IV, CIS124, CIS224 or CIS229 UNIX System Administration, and CIS113 Wireless LANs or CIS224.

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
50

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics
1. Basics of LAN Design
2. Customer Needs Assessment
3. Network Design
4. Implementation Plan and Timelines
5. Install and Configure all Server and LAN components
6. Network Testing & Evaluation
7. Implementation Project Presentations

Analyze customer requirements for a new Local Area Network (LAN).

Design a LAN solution detailing structured cabling components, switches, routers, desktop and server hardware, network and client operating systems.

Create a technical project plan and timeline for implementation.

Install, configure and fully implement your network design.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
- The above objectives will be verified by their design proposal.
- The working implementation of the designed LAN.
- The group presentation made explaining their design.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for CIS 295

CIS296 - Information Assurance Methodology

Overview

Subject
Computer Information Systems

Academic Department
Computer Technology

School
Business, Entrepreneurshp, PD

Course Description
A capstone course providing hands-on experiences in the planning, implementation, and maintenance of Information Security systems. Covers security technologies and tools, footprinting, scanning and enumeration, web browser security, access control, data management and recovery, log security issues, network intrusion detection systems, virtual private networks, encryption and malware prevention, and defense. Analyzes and implements information security techniques through laboratory exercises.

Course Pre-requisite(s)
CRJ131 Intro Law Enf & Crim Just and CIS125 Prin of Programming Logic and CIS280 Info Assurance and Security and (CNT110 CCNA: Networking I OR CIS112 Intro to Networking)

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
45

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Footprinting
2. Scanning & Enumeration
3. Windows OS Processes & Services
4. Vulnerability Identification & Research Validation
5. Vulnerability Validation
6. System Remediation
7. Windows Browser Security & Configuration
8. Data Management
9. Data Backup & Recovery
10. Access Control
11. Host IDS
12. Log Security
13. Windows Privacy & Anti-forensics Issues
14. Software Firewalls
15. Linksys Firewalls Router and Access Control Points
16. Network IDS
17. Network Traffic Analysis
18. VPN and Remote Access
19. Digital Certificates
20. Password Circumvention
21. Antivirus
22. Malware Prevention
23. Linux Labs
24. Critical Thinking and Information Literacy in Information Assurance

Recognize and describe the clear distinction between the actions taken by an ethical information security professional as opposed to the activities of a computer hacker.

Demonstrate knowledge and practice common tasks performed by Information Security (InfoSec) personnel in the course of their duties or career.

Identify, practice (hands-on activities), and analyze common computer security technology systems (software and hardware).

Identify and document security issue(s) of the Incident Response scenario presented by your Instructor.

Analyze and document the security risks and vulnerabilities associated with the Security Incident Response scenario presented by your Instructor.

Design a security solution detailing short and long term objectives to resolve the identified security issue(s).

Evaluate and select security tools for the proposed security solution. Defend and document your security tool choices.

Document the proposed security network architecture with diagrams, PowerPoint presentations, hardware equipment, software list, and a budget.

Create new security policies required to support your security network architecture solution.

Demonstrate design feasibility by implementing a prototype of the proposed security network architecture.

Define the technical project plan and timeline for implementing your security network architecture solution.

Analyze and document the security benefits, possible technical issues, and required resources needed to complete your project.

Analyze and evaluate information in order to identify the need for research to draw conclusions, formulate inferences, solve problems and make decisions in the context of Computer Information Systems.

Demonstrate information literacy by locating, evaluating, selecting, organizing, synthesizing, and ethically documenting information from multiple sources using both informal and formal formats, in the context of Computer Information Systems.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement

- Assessment of student performance will be determined by lab assignments, examinations, Discussion Boards and a Documentation Binder with documentation and cited sources or references.
- All additional assessment of student achievement is left to the discretion of the instructor.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for CIS 296

CIS297 - Spec Topics in Comp Information Systems

Overview

Subject
Computer Information Systems

Academic Department
Computer Technology

School
Business, Entrepreneurshp, PD

Course Description
Explores selected topics as determined by the academic department and the instructor with emphasis on current Computer Information System trends. The specific special topic will be announced together with the prerequisites when offered. Student can repeat the course when different topics are offered, earning credit for each different topic.

Course Pre-requisite(s)
As appropriate

Course Co-requisite(s)
As appropriate

Credit Hours
1

Total Contact Hours

Total Instructor Contact Hours:
16

Total Student Contact Hours:
16

Academic Level
Undergraduate

Goals, Topics, and Objectives

Course Goals
To provide the instructional flexibility needed to address the specific needs of a targeted student population.
Core Course Topics
To be determined by the instructor.

To be developed by the instructor for each individual offering

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of academic achievement may include (but is not limited to) exams, quizzes, homework, and laboratory assignments.

General Course Requirements and Recommendations
To be determined by the instructor. A detailed course syllabi for each section of CIS297 Spec Topics in Comp Info Sys offered will be presented to the School of Business, Entrepreneurship, and Professional Development and Curriculum Committee "For Information Only" by the mid-semester point of the term the course is offered.

Texts
To be determined by the instructor.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for CIS 297

CIS298 - Spec Topics in Comp Information Systems

Overview

Subject
Computer Information Systems

Academic Department
Computer Technology

School
Business, Entrepreneurshp, PD

Course Description
Explores selected topics as determined by the academic department and the instructor with emphasis on current Computer Information System trends. The specific special topic will be announced together with the prerequisites when offered. Student can repeat the course when different topics are offered, earning credit for each different topic.

Course Pre-requisite(s)
As appropriate

Course Co-requisite(s)
As appropriate

Credit Hours
2

Total Contact Hours

Total Instructor Contact Hours:
32

Total Student Contact Hours:
32

Academic Level
Undergraduate

Goals, Topics, and Objectives

Course Goals
To provide the instructional flexibility needed to address the specific needs of a targeted student population.

Core Course Topics
To be determined by the instructor.

To be developed by the instructor for each individual offering.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of academic achievement may include (but is not limited to) exams, quizzes, homework, and laboratory assignments.

General Course Requirements and Recommendations
To be determined by the instructor. A detailed course syllabi for each section of CIS298 Spec Topics in Comp Info Sys offered will be presented to the School of Business, Entrepreneurship, and Professional Development and Curriculum Committee "For Information Only" by the mid-semester point of the term the course is offered.

Texts
To be determined by the instructor.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for CIS 298

CIS299 - Spec Topics in Comp Info Systems

Overview

Subject
Computer Information Systems

Academic Department
Computer Technology

School
Business, Entrepreneurshp, PD

Course Description
Explores selected topics as determined by the academic department and the instructor with emphasis on current Computer Information System trends. The specific special topic will be announced together with the prerequisites when offered. Student can repeat the course when different topics are offered, earning credit for each different topic.

Course Pre-requisite(s)
As appropriate

Course Co-requisite(s)
As appropriate

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Academic Level
Undergraduate

Goals, Topics, and Objectives

Course Goals
To provide the instructional flexibility needed to address the specific needs of a targeted student population.

Core Course Topics
To be determined by the instructor.

To provide the instructional flexibility needed to address the specific needs of a targeted student population.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of academic achievement may include (but is not limited to) exams, quizzes, homework, and laboratory assignments.

General Course Requirements and Recommendations
To be determined by the instructor. A detailed course syllabi for each section of CIS299 Spec Topics in Comp Info Sys offered will be presented to the School of Business, Entrepreneurship, and Professional Development and Curriculum Committee "For Information Only" by the mid-semester point of the term the course is offered.

Texts
To be determined by the instructor.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for CIS 299

CNT110 - CCNA: Networking I

Overview

Subject
CISCO Academy

Academic Department
Computer Technology

School
Business, Entrepreneurshp, PD

Course Description
The first in a series of three courses designed to help prepare students for entry-level networking jobs and the CCNA (Cisco Certified Network Associate) certification. Introduces networking models, protocols, and elements that connect users, devices, applications, and data through the Internet and across modern computer networks. By the end of the course, students can perform basic configurations for routers and switches and build simple local area networks (LANs) that integrate IP addressing schemes and foundational network security. Strongly recommended that students be very familiar with working within a Windows environment and using a Web browser before taking this course. Note: Course topics help students prepare for the CCNA certification exam, but the exam is not included in this course. Industry certification exams are administered by an independent testing agency.

Credit Hours
4

Total Contact Hours

Total Instructor Contact Hours:
77

Total Student Contact Hours:
77

Course Fee
75

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Departmental Exam, Skilled Demonstration, Licensure/certifications

Credit for Prior College Level Learning (CPCLL) Details

Departmental Exam Details

A student may be granted credit for this course through credit for prior college-level learning if s/he scores a proficient score on a written assessment, on a skills-based demonstration, and has a current CCNA or higher Cisco certification. Departmental exam is given in department by department faculty. Faculty will grade exam based on evaluation rubric. Evaluation rubric and exam topics and objectives located in School's Office.

Skilled Demonstration Details

A student may be granted credit for this course through credit for prior college-level learning if s/he scores a proficient score on a written assessment, on a skills-based demonstration, and has a current CCNA-level or higher Cisco certification. Skills-based demonstration is given in department by department faculty. Faculty will assess demonstration based on evaluation rubric. Evaluation rubric and student checklist located in School's Office.

Licensure/Certification

Current CCNA certification

Licensure/Certification Details

A student may be granted credit for this course through credit for prior college-level learning if s/he scores a proficient score on a written assessment, on a skills-based demonstration, and has a current CCNA-level or higher Cisco certification. Department faculty will verify certification. Verified certification and the CPCLL application will be copied, signed, dated, and retained in the School's Office.

Goals, Topics, and Objectives

Core Course Topics

1. Network components
2. Network topologies
3. Basic switch and end device configuration
4. Network protocols and models
5. Purpose and characteristics of OSI Model layers
6. Number systems
7. Ethernet switching
8. Address resolution
9. Basic router configuration
10. IPv4 and IPv6 Addressing
11. Network security fundamentals
12. Network troubleshooting

Implement initial settings including passwords, IP addressing, and default gateway parameters on a network switch and end devices.

Explain how network protocols enable devices to access local and remote network resources.

Explain how physical layer protocols, services, and network media support communications across data networks.

Calculate numbers between decimal, binary, and hexadecimal systems.

Explain how media access control in the data link layer supports communication across networks

Explain how Ethernet operates in a switched network.

Explain how routers use network layer protocols and services to enable end-to-end connectivity.

Explain how ARP (address resolution protocol) and ND (network discovery) enable communication on a network.

Implement initial settings on a router and end devices.

Calculate an IPv4 subnetting scheme to efficiently segment a network.

Implement an IPv6 addressing scheme.

Use various tools to test network connectivity.

Compare the operations of transport layer protocols in supporting end-to-end communication.

Explain the operation of application layer protocols in providing support to end-user applications.

Configure switches and routers with device hardening features to enhance security.

Implement a network design for a small network to include a router, a switch, and end devices.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Students will be assessed based on lab work, standardized multiple-choice online chapter assessments, a midterm, and a final exam with a hands-on, skills-based assessment partly developed by Cisco Systems.

Grading Scale

LETTER GRADE	PERCENTAGE
A+	97-100%
A	93-96%
A-	90-92%
B+	87-89%
B	83-86%
B-	80-82%
C+	77-79%
C	73-76%
C-	70-72%
D+	67-69%
D	63-66%
D-	60-62%
E	0-59%

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for CNT 110

CNT120 - CCNA: Networking II

Overview

Subject
CISCO Academy

Academic Department
Computer Technology

School
Business, Entrepreneurshp, PD

Course Description
The second in a series of three courses designed to help prepare students for entry-level networking jobs and the CCNA (Cisco Certified Network Associate) certification. Focuses on switching technologies and router operations that support small-to-medium business networks and includes wireless local area networks (WLANs) and security concepts. Students learn key switching and routing concepts. Students perform basic network configuration and troubleshooting, identify and mitigate LAN security threats, and configure and secure a basic WLAN. Note: course topics help students prepare for the CCNA certification exam, but the exam is not included in this course. Industry certification exams are administered by an independent testing agency.

Course Pre-requisite(s)
CNT110 CCNA: Networking I

Credit Hours
4

Total Contact Hours

Total Instructor Contact Hours:
77

Total Student Contact Hours:
77

Course Fee
75

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Departmental Exam, Skilled Demonstration, Licensure/certifications

Credit for Prior College Level Learning (CPCLL) Details
Departmental Exam Details

A student may be granted credit for this course through credit for prior college-level learning if s/he scores a proficient score on a written assessment, on a skills-based demonstration, and has a current CCNA-level or higher Cisco certification. Departmental exam is given in department by department faculty. Faculty will grade exam based on evaluation rubric. Evaluation rubric and exam topics and objectives located in School's Office.

Skilled Demonstration Details

A student may be granted credit for this course through credit for prior college-level learning if s/he scores a proficient score on a written assessment, on a skills-based demonstration, and has a current CCNA-level or higher Cisco certification. Skills-based demonstration is given in department by department faculty. Faculty will assess demonstration based on evaluation rubric. Evaluation rubric and student checklist located in School's Office.

Licensure/Certification

Current CCNA certification

Licensure/Certification Details

A student may be granted credit for this course through credit for prior college-level learning if s/he scores a proficient score on a written assessment, on a skills-based demonstration, and has a current CCNA-level or higher Cisco certification. Department faculty will verify certification. Verified certification and the CPCLL application will be copied, signed, dated, and retained in the School's Office.

Goals, Topics, and Objectives

Core Course Topics

1. Basic switch and router configuration
2. Switching concepts
3. VLANs, VLAN configuration, and inter-VLAN routing
4. STP purpose and operation
5. Etherchannel
6. DHCPv4 concepts
7. SLAAC and DHCPv6 concepts
8. FHRP concepts
9. LAN security concepts
10. Switch security configurations
11. WLAN concepts and configuration
12. Routing concepts
13. IP static routing configuration and troubleshooting

Configure devices by using security best practices.

Explain how Layer 2 switches forward data.

Implement and troubleshoot VLANs, trunking, and inter-VLAN routing in a switched network.

Explain how STP enables redundancy in a Layer 2 network.

Describe, configure, and troubleshoot EtherChannel on switched links.

Implement DHCPv4 to operate across multiple LANs.

Configure dynamic address allocation in IPv6 networks.

Explain how FHRPs provide default gateway services in a redundant network

Explain how vulnerabilities compromise LAN security.

Implement switch security to mitigate LAN attacks.

Implement a WLAN using a wireless router and WLC.
Explain how routers use information in packets to make forwarding decisions.
Configure and troubleshoot IPv4 and IPv6 static and default routes.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Students will be assessed based on lab work, standardized multiple-choice online chapter assessments, a midterm, a final exam with a hands-on, skills-based assessment partly developed by CISCO Systems.

Grading Scale

LETTER GRADE	PERCENTAGE
A+	97-100%
A	93-96%
A-	90-92%
B+	87-89%
B	83-86%
B-	80-82%
C+	77-79%
C	73-76%
C-	70-72%
D+	67-69%
D	63-66%
D-	60-62%
E	0-59%

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for CNT 120

CNT210 - CCNA: Networking III

Overview

Subject
CISCO Academy

Academic Department
Computer Technology

School
Business, Entrepreneurshp, PD

Course Description
This is the third course in a series of four courses in the Cisco Certified Network Associate (CCNA) Certificate of Achievement at HFC. This course focuses on the architectures and considerations related to designing, securing, operating, and troubleshooting enterprise networks. This course covers wide area network (WAN) technologies and quality of service (QoS) mechanisms used for secure remote access. This course also introduces software-defined networking, virtualization, and automation concepts that support the digitalization of networks. Students gain skills to configure and troubleshoot enterprise networks, and learn to identify and protect against cybersecurity threats. They are introduced to network management tools and learn key concepts of software-defined networking, including controller-based architectures and how application programming interfaces (APIs) enable network automation.

Course Pre-requisite(s)
CNT110 CCNA: Networking I current version, or instructor permission CNT120 CCNA: Networking II current version, or instructor permission

Credit Hours
4

Total Contact Hours
Total Instructor Contact Hours:
77

Total Student Contact Hours:
77

Course Fee
75

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Departmental Exam, Skilled Demonstration, Licensure/certifications

Credit for Prior College Level Learning (CPCLL) Details
Additional CPCLL Fee

$50.00

Fees associated with Credit for Prior College Level Learning application
50.0

Departmental Exam Details

A student may be granted credit for this course through credit for prior college-level learning if s/he scores a proficient score on a written assessment, on a skills-based demonstration, and has a current CCNA-level or higher Cisco certification (or expired no more than 3 years). Departmental exam is given in department-by-department faculty. Faculty will grade exam based on evaluation rubric. Evaluation rubric and exam topics and objectives located in School's Office.

Skilled Demonstration Details

A student may be granted credit for this course through credit for prior college-level learning if s/he scores a proficient score on a written assessment, on a skills-based demonstration, and has a current CCNA-level or higher Cisco certification (or expired no more than 3 years). Skills-based demonstration is given in department-by-department faculty. Faculty will assess demonstration based on evaluation rubric. Evaluation rubric and student checklist located in School's Office.

Licensure/Certification

Current CCNA certification, or expired no more than 3 years

Licensure/Certification Details

A student may be granted credit for this course through credit for prior college-level learning if s/he scores a proficient score on a written assessment, on a skills-based demonstration, and has a current CCNA-level or higher Cisco certification (or expired no more than 3 years). Department faculty will verify certification. Verified certification and the CPCLL application will be copied, signed, dated, and retained in the School's Office.

Goals, Topics, and Objectives

Core Course Topics

1. Open Shortest Path First (OSPF) Features and Characteristics
2. Current State of Cybersecruity
3. Purpose of Access Control Lists (ACLs)
4. Network Address Translation (NAT) Characteristics
5. Purpose of Wide Area Networks (WANs)
6. Virtual Private Network (VPN) Technology
7. Network Transmission Quality
8. Device Discovery with Cisco Discovery Protocol (CDP)
9. Hierarchical Networks
10. Network Documentation and Troubleshooting
11. Cloud Computing
12. Automation Overview

Describe basic OSPF features and characteristics
Describe best practices for protecting a network.
Configure IPv4 ACLs to filter traffic to meet networking requirements.
Configure NAT services on the edge router to provide IPv4 address scalability.
Explain how VPNs and IP Security (IPsec) secure site-to-site and remote access connectivity.
Explain how networking devices implement Quality of Service (QoS).

Use CDP to map a network topology.

Explain how network documentation is developed and used to troubleshoot network issues.

Explain the purpose and characteristics of network virtualization.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Students will be assessed based on lab work, standardized multiple-choice online chapter assessments, a midterm, and a final exam with a hands-on, skills-based assessment partly developed by Cisco Systems.

Grading Scale
Students will be assessed based on lab work, standardized multiple-choice online chapter assessments, a midterm, a final exam with a hands-on, skills-based practical assessment partly developed by Cisco Systems.

LETTER GRADE	PERCENTAGE
A+	97-100%
A	93-96%
A-	90-92%
B+	87-89%
B	83-86%
B-	80-82%
C+	77-79%
C	73-76%
C-	70-72%
D+	67-69%
D	63-66%
D-	60-62%
E	0-59%

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for CNT 210

CNT220 - CCNA: Networking IV

Overview

Subject
CISCO Academy

Academic Department
Computer Technology

School
Business, Entrepreneurshp, PD

Course Description
This course is the last in a series of four courses in the Cisco Certified Network Associate (CCNA) Certificate of Achievement at HFC and focuses on Network Security. This course equips students with the knowledge and skills needed to prepare for entry-level security specialist careers. This course is a hands-on, career-oriented e-learning solution that emphasizes practical experience. It is a blended curriculum with both online and classroom learning. This course aims to develop an in-depth understanding of network security principles as well as the tools and configurations required to secure a network.

Course Pre-requisite(s)
CNT210 CCNA: Networking III current version, or instructor permission

Credit Hours
4

Total Contact Hours
Total Instructor Contact Hours:
77

Total Student Contact Hours:
77

Course Fee
75

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Departmental Exam, Skilled Demonstration, Licensure/certifications

Fees associated with Credit for Prior College Level Learning application
50.0

Goals, Topics, and Objectives

Core Course Topics

- Securing Networks
- Mitigating Threats
- Authentication, Authorization and Accounting (AAA)
- Access Control Lists (ACLs)
- Firewall Technologies
- Cryptographic Services
- Virtual Private Networks (VPNs)
- Introduction to the Cisco Adaptive Security Appliance (ASA)
- Network Security Testing

Explain network threats, mitigation techniques and the basics of securing a network

Configure command authorization using privilege levels and role-based Command Line Interface (CLI)

Configure Authentication, Authorization, Accounting (AAA) to secure a network

Implement Access Control Lists (ACLs) to filter traffic and mitigate network attacks on a network

Explain how the types of encryption, hashes, and digital signatures work together to provide confidentiality, integrity, and authentication.

Implement security measures to mitigate Layer 2 attacks

Explain how the types of encryption, hashes, and digital signatures work together to provide confidentiality, integrity, and authentication

Implement secure Virtual Private Networks (VPNs)

Explain how the Adaptive Security Appliance (ASA) operates as an advanced stateful firewall

Implement an ASA firewall configuration

Test network security and create a technical security policy

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Letter
GradePercentageA+97-100%A93-96%A-90-92%B+87-89%B83-86%B-80-82%C+77-79%C73-76%C-70-72%D+67-69%D63-66%D-60-62%E0-59%

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for CNT 220

CNT260 - Network Security

Overview

Subject
CISCO Academy

Academic Department
Computer Technology

School
Business, Entrepreneurshp, PD

Course Description
Introduces network security. Emphasizes security terminology and concepts, network security design, security threats and vulnerabilities, security assessment tools and techniques, application, host, and data security, access control concepts and implementation, risk management and business continuity, and basic cryptography through laboratory exercises and detailed lectures. Course topics typically help students prepare for the CompTIA Security+ certification exam. NOTE: This exam is not included in this course. Industry certification exams are administered by an independent testing agency.

Course Pre-requisite(s)
CNT120 CCNA: Networking II or CIS112 Intro to Networking; or Instructor Permission

Credit Hours
4

Total Contact Hours
Total Instructor Contact Hours:
62

Total Student Contact Hours:
62

Course Fee
50

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

- Network Security Terminology and Concepts
- Network Security Design and Implementation
- Risk Management and Business Continuity
- Network Security Threats and Vulnerabilities
- Security Assessment Tools and Techniques
- Application, Host, Data, and Wireless Security
- Access Control Concepts and Implementation
- Basic and Advanced Cryptography
- Malware and Social Engineering
- Application and Network Attacks
- Vulnerability Assessment and Mitigating Attacks

Describe basic network security terminology and concepts

Explain the security function of various network devices and technologies.

Distinguish and differentiate between network design elements.

Explain the security concerns associated with basic networking devices, network media, security topologies and systems.

Explain the security implications of physical security, risk management, disaster recovery, business continuity, and security policies and procedures.

Analyze and differentiate among different types of network attacks.

Assess various tools and techniques used to discover security threats and vulnerabilities.

Plan the appropriate actions to mitigate vulnerability and risk.

Explain the importance of application, host, and data security.

Differentiate between and explain best practices of authentication, authorization, and access control.

Implement security control best practices related to account management.

Explain general cryptography terminology and concepts.

Apply appropriate cryptographic tools.

Explain the concept of public key infrastructure (PKI).

Implement PKI.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Students will be assessed based on lab work, multiple-choice and essay type chapter tests, a midterm, and a final exam.
Grading Scale

LETTER GRADE	PERCENTAGE
A+	97-100%
A	93-96%
A-	90-92%
B+	87-89%
B	83-86%
B-	80-82%
C+	77-79%
C	73-76%
C-	70-72%
D+	67-69%
D	63-66%
D-	60-62%
E	0-59%

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for CNT 260

COLL101 - College Success

Overview

Subject
Counseling

Academic Department
Counseling

School
Student Services

Course Description
Intended for students seeking to maximize their college experience; students will discover ways to achieve academic success by learning how to navigate a diverse campus environment. An emphasis will be given to using academic support systems, thinking critically with career decision-making, program planning, time management, and college financing, together with implementing success motivators, study habits, and testing strategies. Students will create action plans that will help them focus on achieving academic and career success.

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
12

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. The college process
2. The career world
3. Time management, values, academic success and stress
4. Study habits, test taking strategies, and anxiety
5. Academic support systems and rebounding from failing situations
6. Money Management and Financing college
7. Valuing Diversity
8. Critical Thinking

Identify resources and policies using the college website.

Discuss diversity and engage in at least one activity that exposes diversity.

Calculate a grade point average (GPA).

Complete career assessments and analyze the results.

Report on one career and defend its viability as a career option.

Prepare an academic plan that supports a career choice.

Complete values and time assessments.

Analyze value-time assessments to create a study plan for reducing stress and improving success.

Discuss distractions interfering with college and prepare an action plan to cope with distractions.

Identify a learning style and use it to reduce stress and anxiety.

Taking notes and then describe the importance of note taking.

Identify at least one test taking strategy to alleviate test anxiety and construct an action plan using that strategy.

Identify personal motivators and explain how they can be used to promote academic success.

Use at least one academic support system and report on the experience.

Identify the different levels of academic degrees, their corresponding costs, and at least one college that might have transfer potential.

Describe and explain the differences between financial aid options.

Identify alternatives to reducing dependency on financial aid.

Prepare a financial plan to support academic and career goals.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of student learning may include, but not be limited to, writing assignments, special research reports, career inventories, Interviews and oral reports.

General Course Requirements and Recommendations
This is a hybrid course which requires the student to complete online assignments.

Grading Scale
Students must attain at least 60% to pass the class.
Texts
As determined by the Counseling Division.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for COLL 101

COLL103 - College Reconnect

Overview

Subject
Counseling

Academic Department
Counseling

School
Student Services

Course Description
This course is specifically designed to help Adult students transition to college and achieve academic and career success. As an Adult Learner you will learn how to navigate coming back to a college environment, familiarize yourself with online education, manage time, maximize your learning, discover ways to stay motivated, think critically, take tests and develop a career/academic plan. Being successful in these areas is the goal of this course.

Credit Hours
1

Total Contact Hours
Total Instructor Contact Hours:
16

Total Student Contact Hours:
16

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Clarify and develop meaningful values.
2. Set and accomplish realistic goals.
3. Determine your learning style.
4. Learn to manage time and develop organizational skills.
5. Develop critical thinking ability.
6. Develop reading and writing skills.
7. Communicate effectively—both verbally and in writing.
8. Develop good test taking skills.

Clarify and develop meaningful values.

Set and accomplish realistic goals.

Determine your learning style.

Learn to manage time and develop organizational skills.

Develop critical thinking ability.

Develop reading and writing skills.

Communicate effectivelyboth verbally and in writing.

Develop good test taking skills.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Attendance, class participation, and submitting assignments on time.

General Course Requirements and Recommendations
This course is taught 100% online in synchronous format. Synchronous format means that there will be weekly real-time class meetings in which you must be present. These meetings will be conducted using the "Microsoft Teams Application." You need Internet access and a supported web browser like Chrome, Firefox or Safari in order to complete this class and the required assignments. The textbook is a part of the online materials. This is a 1-credit course, which means that the student has to attend 1 1/2 hours of instruction and put in additional study time for required assignments. Class participation means you are present and participate in real time chat during the sessions. The class week begins on Monday and ends Sunday night. The HFC Moodle system contains the additional readings and exercises for each week that should be completed by Sunday night before the next class.
Texts
The Adult Learner's Companion: A Guide For The Adult College Student, 2nd edition by Deborah Davis, Ph.D.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for COLL 103

COMM151 - Introduction to Social Media

Overview

Subject
Journalism

Academic Department
Media Communication Arts

School
Liberal Arts

Course Description
Introduces students to different social media platforms and how they are used by people and organizations. Students will critically examine various social media forms in the context of society. Students will be exposed to the rules of ethical communication, create a basic social media communication plan, and gain basic understanding of social media analytics.

Course Pre-requisite(s)
ENG131 Introduction College Writing eligible

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
10

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Portfolio Review, Interview, Other

Credit for Prior College Level Learning (CPCLL) Details
Portfolio Review Details

Provide, in writing, a request to the department. Indicate the rationale for requesting credit and describing the type of college-level learning or course descriptions. Portfolio must contain 3-5 pieces of evidence that illustrates competency in all course learning objectives. Department faculty will evaluate submitted portfolios based on the evaluation rubric. Evaluation rubric and student checklist located in The School of Liberal Arts office. Interview with appropriate departmental faculty to discuss the request and work samples.

Interview Details

Interview, given in department by department faculty. Faculty will interview applicants based on submitted portfolio and will assess against evaluation rubric. Evaluation rubric and student checklist located in The School of Liberal Arts office.

Goals, Topics, and Objectives

Course Goals
To introduce students to digital literacy by demonstrating productive social media use, and establishing a framework for understanding and evaluating the various platforms.

Core Course Topics

1. Description of social media
2. Social media and strategic alternatives
3. Benefits of social media on individuals and groups
4. Purposes of social media platforms, their history, relevance and use as a participatory culture
5. Influences of social media communication on individuals, businesses and society
6. Social media plan development and data analytics
7. The power and political economy of social media
8. Ethics in the digital world

Describe social media.
Identify various social media and strategic alternatives.
Examine the collective and individual benefits of social media.
Differentiate between the various purposes of social media platforms.
Analyze the different social media platforms as a participatory culture.
Compare and contrast the history and relevance of current social media communication platforms.
Evaluate the positive and negative influences of social media communication on individuals, businesses and society.
Develop a basic social media plan and evaluate the data through social media analytics.
Discuss and debate the power and political economy of social media.
Recognize the role of ethics in the digital world.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of Academic Achievement determined by instructor, but may include:

- Summary and analysis of Case Studies
- Quizzes
- Written exams
- Discussions
- Essay/Papers
- Collaborative research projects
- Presentations

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for COMM 151

COMM190 - Co-op in Communications

Overview

Subject
Journalism

Academic Department
Media Communication Arts

School
Liberal Arts

Course Description
Cooperative education is a structured method of combining classroom-based education with practical work experience. A cooperative education experience, commonly known as a "co-op," provides academic credit for structured employment experience. Work experience must be directly related to the student's declared major to be eligible.To register for this course, a student must have completed 50% of core coursework, maintain an overall GPA of 2.0 and a program specific GPA of 2.5.

Course Pre-requisite(s)
Permission from Career Services Officer or Job Developer in the Office of Career Services

Credit Hours
1

Total Contact Hours

Total Instructor Contact Hours:
3

Total Student Contact Hours:
75

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
Student will submit a formal request in writing to the faculty and Associate Dean for work experience to be considered for Credit for Prior College-Level Learning.

The student will complete an interview, a reflective paper, or a presentation to the faculty in which the student develops and describes the learning objectives supported by the work experience, how those learning objectives were achieved and how that learning was put into practice.

Finally, the student must also provide a portfolio (or something comparable) that shows the work completed, and provide some form of documentation confirming the work experience (a resume does not suffice) for which Credit for Prior College-Level Learning is requested.

Goals, Topics, and Objectives

Course Goals
Cooperative education helps students make the school-to-work transition, develop career and program-related learning objectives, and work on applicable skills for employment. Placements should provide students with the opportunity to apply and expand upon knowledge learned in the classroom, and develop the skills acquired in their coursework to align with the standards and expectations set by the worksite.

Core Course Topics

1. Core Career-Focused Topics:

   A. Professional Dress and Demeanor (attitude, posture, courteousness)
   B. Workplace Communication
   C. Interviewing Skills
   D. Resume Building
   E. Networking and Social Media
   F. Seeking Employment G. Career Advancement

1-3 program specific learning objectives will be developed by the instructor for each individual offering.
Students will create 1-3 learning objectives per credit to be approved by instructor for each individual offering.
Build a resume that meets standards of Career Services Officer.
Articulate the reasons for professional attire.
Wear professional attire while on the worksite, Attend career workshop in professional dress.
Display appropriate professional attitude and demeanor while on the worksite.
Interview effectively, Attend mock interview, give appropriate answers to five 5 questions
Complete a written job application in a prompt, professional manner with all information legible, error-free, and thorough.
Display understanding of the appropriate use of Social Media sites (Facebook, LinkedIn, and Twitter) during Career Services workshop.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment will be determined by the instructor based on what is in the best interest of the student's academic growth, including future employability of the student. Assessment may include, but isn't limited to:

- Major final project
- Weekly journal
- Creation and attainment of all learning objectives
- Participation in a career-focused workshop
- Consistent and prompt attendance at worksite
- Employer evaluation

General Course Requirements and Recommendations
To be determined by the instructor. Detailed course syllabi will be standardized for all co-op courses and individual course requirements will be available to the AEC and College Council by request "For information only" for each term that the course is offered.

Texts
None

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for COMM 190

COMM290 - Co-op in Communications

Overview

Subject
Journalism

Academic Department
Media Communication Arts

School
Liberal Arts

Course Description
Cooperative education is a structured method of combining classroom-based education with practical work experience. A cooperative education experience, commonly known as a "co-op," provides academic credit for structured employment experience. Work experience must be directly related to the student's declared major to be eligible.To register for this course, a student must have completed 50% of core coursework, maintain an overall GPA of 2.0 and a program specific GPA of 2.5.

Course Pre-requisite(s)
Permission from Career Services Officer or Job Developer in the Office of Career Services

Credit Hours
2

Total Contact Hours

Total Instructor Contact Hours:
3

Total Student Contact Hours:
150

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Goals, Topics, and Objectives

Course Goals
Cooperative education helps students make the school-to-work transition, develop career and program-related learning objectives, and work on applicable skills for employment. Placements should provide students with the opportunity to apply and expand upon knowledge learned in the classroom, and develop the skills acquired in their coursework to align with the standards and expectations set by the worksite.

Core Course Topics

1. Core Career-Focused Topics:

   A. Professional Dress and Demeanor (attitude, posture, courteousness)
   B. Workplace Communication
   C. Interviewing Skills
   D. Resume Building
   E. Networking and Social Media
   F. Seeking Employment
   G. Career Advancement

1-3 program specific learning objectives will be developed by the instructor for each individual offering
Create 1-3 learning objectives per credit to be approved by instructor for each individual offering.
Build a resume that meets standards of Career Services Officer.
Articulate the reasons for professional attire.
Wear professional attire while on the worksite.
Attend career workshop in professional dress.
Display appropriate professional attitude and demeanor while on the worksite.
Interview effectively.
Attend mock interview, give appropriate answers to five 5 questions
Complete a written job application in a prompt, professional manner with all information legible, error-free, and thorough.
Display understanding of the appropriate use of Social Media sites (Facebook, LinkedIn, and Twitter) during Career Services workshop.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment will be determined by the instructor based on what is in the best interest of the student's academic growth, including future employability of the student. Assessment may include, but isn't limited to:

- Major final project
- Weekly journal
- Creation and attainment of all learning objectives
- Participation in a career-focused workshop
- Consistent and prompt attendance at worksite
- Employer evaluation

General Course Requirements and Recommendations
To be determined by the instructor. Detailed course syllabi will be standardized for all co-op courses and individual course requirements will be available to the AEC and College Council by request "For information only" for each term that the course is offered.

Texts
None

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for COMM 290

COUN110 - Human Potential Seminar

Overview

Subject
Counseling

Academic Department
Counseling

School
Student Services

Course Description
Examines how to identify and apply positive life skills in order for each individual to discover and any use their strengths, talents and abilities. Covers empathy, peak experiences, internal and external motivational factors, goal setting and values clarification.

Credit Hours
2

Total Contact Hours
Total Instructor Contact Hours:
32

Total Student Contact Hours:
32

Course Fee
2

Academic Level
Undergraduate

Goals, Topics, and Objectives

Course Goals
The overall goal is the actualizing of autonomous, healthy persons who can love self and others and use their potential.

Core Course Topics

1. Self Development
2. How Experiences Shape Personality
3. Positive Empathetic Regard
4. Personal Goal Setting
5. Positive Past History
6. Life Experiences
7. Personal Satisfaction, Success, and Achievements
8. Personal Motivation
9. Values Clarification
10. Strengths and Abilities
11. Goal Setting

Create a pre-self knowledge inventory.

Define self-affirming, self-motivating, self-determining and empathetic positive regard for other people.

Discuss the statement by Herbert Otto indicating that "the average normal person uses no more that 10% of his or her potential."

Evaluate the people and experiences that have helped shape the way you think and feel about yourself today.

Write a summary of a happy moment, a decision you made that changed your life, an achievement you are proud of and a goal you achieved or are working on.

Analyze how one's personal experience unfolds.

Examine your empathetic recall experience.

Analyze your verbal and nonverbal communication with a classmate.

List your helper and killer words.

Apply the criteria for successful goal setting to your long and short term goals

Develop a long range goal you will achieve by the end of class.

Define peak experience.

Record your peak experiences throughout your life span.

Construct twenty (20) peak experiences that have had an affect on your life.

Discuss the list of little peak things that have a positive impact on your life.

Explain how personal satisfactions, successes and achievements have influenced your life.

Write a list of all of your lifetime satisfactions, successes and achievements.

Label your internal and external motivators.

Identify your primary and secondary motivators.

Select your most motivational experiences.

Identify your top five values.

Analyze your participation in the values auction and your goal setting plan.

List your 25 strengths, abilities or talents.

Identify how you are going to use these to achieve your educational, career, academic and personal goals.

Judge your level of success with your short and long term goals

Demonstrate a plan to include goal setting in your daily life.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of student learning may include, but not be limited to, writing assignments, special research reports, Interviews and oral reports.

Grading Scale
Student must attain at least 60% to pass the class.

Texts
Human Potential Seminar: A Positive Approach to Self-Development Basic Guide-Handbook, James D. McHolland

Satisfies Wellness Requirement
Yes

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for COUN 110

COUN111 - Advanced Human Potential Seminar

Overview

Subject
Counseling

Academic Department
Counseling

School
Student Services

Course Description
Use the group process and the tools developed in COUN-110 to further develop life skills that enable each individual to discover his or her potential, and to deal more effectively and efficiently with conflicts, blocks, failures, and life-style problems.

Course Pre-requisite(s)
COUN110 Human Potential Seminar, COUN119 Issues in Personal Growth, COUN125 Life Work Planning or Instructor Permission. C- or better in COUN110 Human Potential Seminar or COUN119 Issues in Personal Growth or COUN125 Life Work Planning.

Credit Hours
2

Total Contact Hours
Total Instructor Contact Hours:
32

Total Student Contact Hours:
32

Course Fee
2

Academic Level
Undergraduate

Goals, Topics, and Objectives

Course Goals
The goal of COUN111 Adv Human Potential Seminar is the actualizing of autonomous, healthy persons who can love self and others, and use their own human potential to effectively deal with conflicts, lack of confidence or life style planning problems.

Core Course Topics

1. Personal Interactions and Life Experiences
2. Values Clarification
3. Conflict
4. Failure
5. Human Potential
6. Life Style
7. Action Goal Plan

Describe how personal interactions and life experiences can have a positive effect on how you live your life.*

Define self-affirming, self-determining, and self-motivating.

Analyze 2-3 life experiences that demonstrate how you see yourself and how you can become more self-affirming.

Identify 3-4 specific experiences that demonstrate how you use your potential, how you live your life, and how you can become more self-determining.

Identify a list of personal values.

Describe the five (5) most important values in which you presently invest your time that will help you become more self-determining and self-motivated.

Identify and discuss the four (4) components of conflict (intrapersonal/interpersonal; clashes/blocks; positive/negative; conflict/problem).

Identify and discuss 2-3 previous conflict situations in defined periods of time to chart your personal history of dealing with conflict.

Analyze the seven (7) methods of preventing the potential conflicts from occurring.

Identify one (1) personal conflict, and analyze the conflict using the 12 step conflict resolution/management process for becoming more self-affirming, self-determining, and developing greater empathic regard for others.

Define Failure.

Discuss the nine (9) questions that help define failure and how to deal with failure to promote becoming more self-motivating.

Identify, analyze, and share 1-2 personal failures using the nine questions "dealing with failure successfully."

Identify and set two (2) personal goals that will help you successfully deal with failure and move you toward becoming more self-affirming, self-determining, and self-motivating, and developing greater greater empathic regard for others.

Define human potential.

Discuss the eight (8) step "Discovering Your Potentialities" questions that lead to becoming more self-affirming, self-determining, and self-motivating.

Identify 3-4 potential helpers and potential killers, and describe how they help or prevent you from maximizing the use of your potential.

Analyze your response to the eight (8) step "Discovering Your Potentialities" questions, and how you can become more self-affirming, self-determining, and self-motivating. *

Establish two (2) personal goals to develop specific potentialities.

Define life style

Analyze your current life style.

Identify 5-8 personal life style changes you desire to make (real me/desired me).

Identify 2-3 personal examples for each segment of the life style considerations and life style meaning questions that lead toward becoming self-affirming, self-determining, and self-motivating.

Describe three (3) personal decisions that will be supported by 2-3 short term goals and 3-4 long term goals that address the decision making process around conflicts, failure, and life style planning.

Analyze one (1) decision dealing with personal conflict, failure, or life style-planning and the supporting short term and long term goals plans.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of student learning may include, but not be limited to, writing assignments, special research reports, Interviews and oral reports.

Grading Scale
Students must attain a 60% to pass the class.

Texts
Human Potential Seminar: A Positive Approach to Self-Development Advance Guide-Handbook, James D. McHolland

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for COUN 111

COUN114 - Stress Management - A Personal Approach

Overview

Subject
Counseling

Academic Department
Counseling

School
Student Services

Course Description
Offers a supportive group setting for students to examine their own personal sources of stress, how these stress factors are affecting them and what they can do to develop more effective coping strategies.

Credit Hours
2

Total Contact Hours
Total Instructor Contact Hours:
32

Total Student Contact Hours:
32

Course Fee
10

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Defining Stress
2. The Symptoms of Stress
3. Managing Stress
4. Personalizing a Stress Management Program

Identify the physical, mental, emotional and environmental components of stress.

Analyze how stress negatively impacts the body from a physical, emotional, environmental and a psychological perspective.

Identify the physical symptoms

Identify the mental symptoms

Identify emotional symptoms.

Identify environmental symptoms.

Engage in physical release exercises.

Engage in mental release exercises.

Engage in emotional release exercises.

Engage in environmental release exercises.

Create a detailed plan to manage one's stress that includes the physical, mental, emotional and environmental aspects of stress.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of student learning may include, but not be limited to, writing assignments, completing inventories, special projects, oral reports, the personalized stress management program and demonstrating the use of stress release exercises.

Grading Scale
Students must attain at least 60% to pass the class.

Satisfies Wellness Requirement
Yes

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for COUN 114

COUN115 - Assertiveness Training

Overview

Subject
Counseling

Academic Department
Counseling

School
Student Services

Course Description
Examines how to improve communication and behavior. Also discusses how to differentiate between assertiveness, passiveness, and aggressiveness.

Credit Hours
1

Total Contact Hours
Total Instructor Contact Hours:
16

Total Student Contact Hours:
16

Course Fee
10

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Defining Assertiveness
2. Differentiating Behavior Patterns Between Passiveness, Assertiveness, Aggressiveness, and Passive-aggressiveness
3. Assertive Techniques to Combat Passive, Aggressive, and Passive-aggressive Behavior

Identify assertive behavior with role playing activities.

Show the value of behaving assertively.

Identify passive, aggressive, and passive-aggressive communication behavior with role playing activities.

Analyze how these behaviors negatively impact communication, resulting in weak behavior.

Integrate assertive techniques with the weak communication behavior patterns.

Role play the following assertive technique: fogging, broken record, and workable compromise.

Role play asking for what you want.

Role play being able to say "no" without feeling guilty or shamed.

Role play anger management techniques that diffuse volatile situation.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessments of student learning may include, but not be limited to, writing assignments, special research reports, Interviews and role playing activities.

Grading Scale
Students must achieve at least a 60% to pass.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for COUN 115

COUN116 - Assertiveness in Daily Living

Overview

Subject
Counseling

Academic Department
Counseling

School
Student Services

Course Description
An advanced course in assertiveness focusing on communication problems with parents, siblings, friends, relatives and strangers, including specific assertive strategies of successful communication with difficult people. Emphasizes how to refuse a request, ask for a favor, respond to criticism and manage one's anger.

Course Pre-requisite(s)
COUN115 Assertiveness Training or instructor's permission.

Credit Hours
1

Total Contact Hours
Total Instructor Contact Hours:
16

Total Student Contact Hours:
16

Course Fee
3

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Defining Assertiveness
2. Passiveness, assertiveness, aggressiveness, and passive-aggressiveness
3. Assertive behavior in typical daily living situations
4. Assertive behavior with difficult people

Definition of assertiveness.
Show the value of behaving assertively.
Define passive, aggressive, and passive-aggressiveness behavior.
Analyze how these behaviors negatively impact communication.
Role play each of these poor communication models.
Role play difficult daily living situations using the following assertive techniques: asking for a favor, paying "no" without feeling guilty, responding to criticism, negotiating a workable compromise, conflict resolution with parents, friends, siblings, strangers, store clerks and asking for what you want in life.
Incorporate assertive role-playing techniques while interacting with difficult people (who often hold positions of power) to resolve conflict without getting angry. These techniques will solve passive and aggressive behavioral problems. Some examples of difficult people in daily living situations can be: parents, siblings, extended family members, friends, children, educators, customer service representatives, law enforcement officials, other governmental representatives, medical personnel and banking officials.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessments of student learning may include, but not be limited to, writing assignments, oral reports, role playing and testing.

Grading Scale
Students must attain at least 60% to pass the class.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for COUN 116

COUN118 - Assertiveness at Work

Overview

Subject
Counseling

Academic Department
Counseling

School
Student Services

Course Description
Discusses how to get the most out of one's work environment. Covers how to apply for a job, ask for a raise and negotiate salary. Examines how to apply assertiveness training techniques to handle both criticism from colleagues and a performance review from a supervisor.

Course Pre-requisite(s)
COUN115 Assertiveness Training or instructor's permission.

Credit Hours
1

Total Contact Hours
Total Instructor Contact Hours:
16

Total Student Contact Hours:
16

Course Fee
6

Academic Level
Undergraduate

Goals, Topics, and Objectives

Course Goals
Upon successful completion of this course students should be able to:

Core Course Topics

1. Defining Assertiveness.
2. Passiveness, aggressiveness, and passive-aggressiveness.
3. Assertive behavior in typical work situations.

Define assertiveness.
Show the value of behaving assertively.
Define passiveness, aggressiveness, and passive-aggressiveness.
Explain how these behaviors negatively impact communication, resulting in weak employee performance.
Role model each of these weak communication behavior patterns.
Incorporate the following assertive techniques while role playing as an employee: fogging, asking, broken record, compromise and anger management.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of student learning may include, but not be limited to, writing assignments, oral reports and role playing activities.

Grading Scale
Students must attain at least 60% to pass the class.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for COUN 118

COUN119 - Issues in Personal Growth

Overview

Subject
Counseling

Academic Department
Counseling

School
Student Services

Course Description
Examines how to identify barriers to personal growth and how to overcome those barriers to find friendship, love and happiness.

Credit Hours
2

Total Contact Hours
Total Instructor Contact Hours:
32

Total Student Contact Hours:
32

Course Fee
3

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Personal Growth
2. Barriers to Personal Growth
3. Overcoming Barriers to Personal Growth
4. Strategies for Personal Growth

Define the phrase "personal growth."

Demonstrate strategies to measure one's personal growth.

Analyze personal growth by using the victim triangle.

Analyze sabotaging behaviors such as: self-defeatism, perfectionism, depression, criticism, being a victim, being a persecutor and living without purpose.

Role play how to promote the following positive behaviors: being positive, building confidence, raising one's self-esteem, following through on commitments and accepting responsibilities as well as consequences.

Establish achievable goals.

Discuss how to surround one's self with positive people network.

Explain how to be friendly to people.

Explain how to live and work with a sense of passion.

Describe how to take care of one's own physical, mental, emotional and spiritual needs.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of student learning may include, but not be limited to, writing assignments, special research projects, inventories and oral reports.
Grading Scale
Students must attain at least a 60% to pass the class.
Satisfies Wellness Requirement
Yes

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for COUN 119

COUN120 - Career Exploration

Overview

Subject
Counseling

Academic Department
Counseling

School
Student Services

Course Description
Examines how to perform a career assessment, create a genogram, and research potential career opportunities.

Credit Hours
1

Total Contact Hours
Total Instructor Contact Hours:
16

Total Student Contact Hours:
16

Course Fee
6

Academic Level
Undergraduate

Goals, Topics, and Objectives

Course Goals
Upon successful completion of this course students should be able to:
Core Course Topics

1. Career Assessment
2. A career versus a job
3. Exploring career options

Analyze data from interest, values, and need assessments to identify overlapping areas.

Create a personal career profile based on the assessments.

Produce a genogram showing a student's family history as it pertains to career and/or job.

Analyze the genogram, and identify career patterns that exist within a student's family structure. Exploring career options

Research a variety of possible career options based upon the assessments.

Identify which career options, if any, are realistic possibilities, and what goal can be set accordingly.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of student learning may include, but not be limited to, writing assignments, special research reports, career inventories, Interviews and oral reports.

Grading Scale
Students much attain at least 60% to pass the class.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for COUN 120

COUN125 - Life Work Planning

Overview

Subject
Counseling

Academic Department
Counseling

School
Student Services

Course Description
Examines and analyzes one's own resources, strengths and constraints to determine what is realistic for future change. Covers decision-making tools which can be utilized for effective planning resulting in alignment between one's life and work goals. Potential challenges are examined through problem-solving techniques.

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
10

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Self-analysis
2. Discovering the world of work
3. Enhancements to one's life work journey
4. Barriers to one's life work journey
5. How to make decisions to improve one's life work journey
6. How to develop a life work plan and report on it

Take a series of assessments that measure one's interests, values, experiences, abilities and personality.

Produce a list of possible careers.

Create a life work profile based on the assessments.

Identify careers from the World of Work Map that match one's life work profile.

Identify factors that can make one's life work journey go smoothly.

Identify factors that have the potential to make one's life work journey difficult.

Identify how one makes decisions based upon models of decision making.

Experience decision making exercise that test one's decision making capabilities.

Identify one major decision within the life arena or work arena that needs to be addressed.

Create a personal plan to operationalize the decisions one is willing to make to improve in either the life or work arena.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of student learning may include, but not be limited to, writing assignments, critical analysis reports, career inventories, Interviews, oral reports and developing a comprehensive life plan.

Grading Scale
Students much attain at least 60% to pass the class.
Satisfies Wellness Requirement
Yes

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for COUN 125

COUN127 - Job Interview Counseling

Overview

Subject
Counseling

Academic Department
Counseling

School
Student Services

Course Description
Offers successful strategies to fight job interview anxiety. Presents creative measures to secure an interview, how to dress appropriately for the interview, how to field questions, what to ask the interviewer and post-interview follow-up. Resume required.

Credit Hours
1

Total Contact Hours
Total Instructor Contact Hours:
16

Total Student Contact Hours:
16

Course Fee
3

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. What is the assertive Interview process?
2. Successful Interview behavior.
3. Strategies to fight anxiety while interviewing.

Explain the ten step process of interviewing for a job that begins before an interview and lasts after the interview has been completed.

Analyze job interview behavior to determine what is effective or ineffective. Explain how an assertive job applicant can control the interview process.

Create an interview checklist to be used as a flow chart while applying for work. Successful interview behavior.

Experience, through role playing, successful interview techniques based upon an assertive approach. Understand the role of technology in the interview process.

Experience stress releasing strategies and exercises to control interview stress.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of student learning may include, but not be limited to, writing assignments, special research reports, Interviews, and role playing a "mock' job Interview.

Grading Scale
Students must attain at least 60% to pass the class.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for COUN 127

COUN128 - Active Parenting

Overview

Subject
Counseling

Academic Department
Counseling

School
Student Services

Course Description
Explores how to apply the basic principles of active parenting to both children and teens. Also discusses topics such as, but not limited to: how to parent children at different developmental states, the development of a child's ethnic identity, effective punishment strategies, challenges faced by working parents, step-families and communication patterns.

Credit Hours
2

Total Contact Hours
Total Instructor Contact Hours:
32

Total Student Contact Hours:
32

Academic Level
Undergraduate

Goals, Topics, and Objectives

Course Goals
The goal is to promote student development and their understanding of: (1) the general concepts, goals and strategies of parenting; (2) how to parent children at different developmental states; and (3) how parenting may vary according to life circumstances.

Core Course Topics

1. The Process of Parenting
2. The Influence of Culture on Parenting
3. How Parents Support Children's Growth and Development
4. Parenting during each Developmental Stage
5. Issues of Single and Working Parents
6. Challenges of Parenting in a Complex Family Structure
7. Parenting in Challenging Times

Explain the three (3) dynamic forces (child, parent, society) involved in the parenting process and how they interact.

Explain the role played by the three (3) dynamic forces of the parenting process.

Describe two (2) steps that are involved in the development of a childs ethnic identity.

Define the term acculturation.

Explain four (4) parenting styles.

Explain the role that unconditional regard plays in the development of high self-esteem, according to Susan Harter.

Analyze the Victim Triangle (persecutor, rescuer and victim)*.

Evaluate the effectiveness of how either you discipline your child or a friend disciplines their child.*

Explain Jean Piagets four (4) cognitive developmental stages.

Explain Erik Eriksons eight (8) psychosocial developmental stages.

Define the five (5) developmental levels (infant, toddler, preschooler, school-age child and adolescent).

Explain two (2) current issues faced by single parents or working parents.

Explain the three (3) family types in terms of work and parenting characteristics (high-status, low-stress, main-secondary).

Analyze the challenge of being a working parent.

Explain three (3) forms of step families (neotraditional, matriarchal, or romantic),

Explain four (4) family communication patterns (consensual, pluralistic, protective and laissez faire).

Define three (3) forms of child abuse (physical, sexual, emotional).

Explain four (4) coping strategies parents use when caring for children and older parents.

Explain three (3) factors that place families at high risk for maltreatment (social context in which family lives, stresses of everyday life, personal qualities parents bring to parenting).

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of student learning may include, but not be limited to, writing assignments, special research reports and oral reports.

Grading Scale
Student must attain at least 60% to pass the class.

Satisfies Wellness Requirement
Yes

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for COUN 128

COUN129 - Personality Type and Success

Overview

Subject
Counseling

Academic Department
Counseling

School
Student Services

Course Description
Covers personality theory/personality type, how to utilize the Myers-Briggs Type Indicator (MBTI) to develop a greater understanding and appreciation of self and others, and how to manage one's personality and accept the personality of others as it relates to relationships, employment, education, communication, lifestyle, and decision-making.

Credit Hours
2

Total Contact Hours

Total Instructor Contact Hours:
32

Total Student Contact Hours:
32

Course Fee
10

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. What is one's personality?
2. Measuring one's personality using MBTI.
3. How to examine personalities according to type.
4. Understanding personality differences.
5. Understanding the role personality plays in one's relationships, employment, education, communication, lifestyle and decision making.

Explain how personality theory have evolved through history.

Discuss specifically how Carl Jung viewed personality type.

Experience the MBTI by completing the assessment.

Explain the four (4) temperament scales that are used in the MBTI.

Clarify what each letter of one's personality type actually means.

Analyze how all of the sixteen personalities mesh together, and the impact each has on relationships, work and school."

Identify how each personality differs from one another.

Identify one's opposite personality type and explain why it is the opposite.

Explain the value of having different personality types.

Analyze how differences in personality can actually improve classroom learning, relationships and the work atmosphere."

Learn how to manage one's personality and accept the personality of others as it relates to: relationships, employment, education, communication, lifestyle and decision making.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of student learning may include, but not be limited to, completing the MBTI (Myers-Briggs Type Indicator), role playing, writing assignments and oral reports.

Grading Scale
Students must attain at least a 60% to pass the class.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for COUN 129

CRJ126 - Introduction to Homeland Security

Overview

Subject
Criminal Justice

Academic Department
Social Sciences

School
Liberal Arts

Course Description
Provides students with a comprehensive overview of Homeland Security policies, practices, and programs. Also discusses local, state, and federal initiatives, as well as the restructuring of the Department of Homeland Security.

Course Pre-requisite(s)
Eligible to take ENG courses at HFC.

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
10

Academic Level
Undergraduate

General Education Category
Social Sciences

Michigan Transfer Agreement (MTA) Category
Category 4: Social Sciences - Applied Degrees, Category 4: Social Sciences - Transfer Degrees

Goals, Topics, and Objectives

Core Course Topics

1. The Problems of Terrorism
2. Terrorist Methods and Weapons
3. Government Actions
4. Homeland Security
5. Legal Issues
6. Private Sector Actions
7. Risk and Emergency Management
8. Life and Public Safety
9. Security
10. Protecting Critical Infrastructures and Key Assets
11. Border and Transportation Security

Define terrorism.

Examine the difference between state and religious sponsored terrorism.

Name the different types of weapons of mass destruction.

Name the four major Acts of Congress to combat terrorism.

Define Homeland Security.

Analyze strategies to prevent and respond to terrorist attacks.

Differentiate between "racial" and "legal" profiling.

Describe the "pendulums of justice".

Identify major problem areas within the private security industry.

Identify the steps in the risk management process.

Describe the roles and responsibilities of "First Responders".

Describe how life and public safety are linked together.

Define the five "D's" of Security.

Analyze strategies on how to protect critical infrastructures.

Define critical infrastructures and key assets.

Describe the Homeland Security threat levels.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Students must meet a score of 70% correct on a multiple-choice exam.

Texts
Terrorism and Homeland Security: An Introduction with Applications by Phillip P. Purpura

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for CRJ 126

CRJ131 - Intro Law Enforcement & Criminal Justice

Overview

Subject
Criminal Justice

Academic Department
Social Sciences

School
Liberal Arts

Course Description
An overview of the criminal justice system in the U.S. Topics covered are: the history of law enforcement: the political, sociological, and philosophic, and background of police functions; and the criminal courts. Constitutional problems as they relate to the police function are surveyed, and the use of recent technology in criminal justice is discussed.

Course Pre-requisite(s)
Eligible to take ENG courses at HFC.

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
10

Academic Level
Undergraduate

General Education Category
Social Sciences

Michigan Transfer Agreement (MTA) Category
Category 4: Social Sciences - Applied Degrees, Category 4: Social Sciences - Transfer Degrees

Goals, Topics, and Objectives

Core Course Topics

1. What Is Criminal Justice
2. Crime Picture in America
3. Crime Causation: The Search for Causes
4. The Nature and Purpose of Law
5. Policing: History, Structure, Purpose and Organization
6. Legal Aspects
7. The Courts: Structure and Participants
8. The Courts: Pretrial and Trial
9. Sentencing
10. Probation and Parole
11. Terrorism and Multi-National Criminal Justice

Define Criminal Justice
Explain the difference between individual rights vs. public order
Identify 3 components of the Criminal Justice System
Describe the 2 ways crime data is collected in the U.S.
List some theories of crime causation
List 2 types of law
Define the elements of a crime
Explain types of defenses to criminal charges
List 3 levels of Law Enforcement
Describe the historical eras of policing
List 3 styles of policing
Define police discretion
Define racial profiling
Identify individual rights from the Bill of Rights*
Explain search and seizure, arrest and interrogation
List court cases relevant to legal issues in policing
Explain the importance of ethics in law enforcement
Identify the 2 court systems in the U.S.

Identify the various pretrial activities

Describe the stages of a criminal trial

Discuss the importance of case law

Define the different types of sentencing

Define probation and parole

Define types of terrorism

Discuss causes of terrorism

Explain differences of the U.S. System, Saudi Arabia and Chinese systems

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
The primary method to assess the achievement of learning objectives will consist of a 50 question Pre- and Post-Test (multiple choice and true and false) and a written essay exam. Topic to be determined by faculty staff.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for CRJ 131

CRJ132 - Police Admin - Staff and Line Operations

Overview

Subject
Criminal Justice

Academic Department
Social Sciences

School
Liberal Arts

Course Description
Focuses on uniformed police operations, both patrol and traffic, as well as principles of organization, management, planning, and crime prevention.

Course Pre-requisite(s)
Completion of CRJ131 Intro Law Enf & Crim Just, with a grade of C or better.

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
10

Academic Level
Undergraduate

General Education Category
Social Sciences

Michigan Transfer Agreement (MTA) Category
Category 4: Social Sciences - Applied Degrees, Category 4: Social Sciences - Transfer Degrees

Goals, Topics, and Objectives

Core Course Topics

1. What are the various roles of police in today's society
2. Understanding the recruitment/selection program for law
3. What is the police subculture?
4. The operation and function of police organizations
5. Ethical decisions in policing
6. New strategies in police organizations
7. Stress in policing
8. Issues of police misconduct
9. Patrol Operations
10. Community Policing

Explain the various roles of the police in the U.S..

List the steps in the recruitment/selection process of police officers.

Explain the three characteristics of the police subculture.

Define the code of silence.

Describe the various operations and functions of policing in the United States.

Discuss the issue of ethics in policing.

Explain racial profiling.

Explain the contemporary strategies in policing.

Discuss the difference between reactive and proactive policing.

Examine the concept of community policing.

Identify the sources of police stress.

Discuss the hazards in policing.

List ways police officers typically cope with stress.

Define illegal arrest.

Distinguish between excessive force and fatal force.

Discuss ways to reduce misconduct.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
The primary methods to assess the achievement of learning objectives will be written exams (both multiple choice and essay). Additionally, students will do an oral presentation demonstrating knowledge of a topic relevant to policing Students will complete a 4-5 page essay regarding critical thinking aspects of the course. This essay will incorporate issues on fatal force, racial profiling, community policing, etc.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for CRJ 132

CRJ134 - Criminal Investigation

Overview

Subject
Criminal Justice

Academic Department
Social Sciences

School
Liberal Arts

Course Description
Introduces criminal investigation and the techniques of forensic science. Topics include information accumulation, specific crimes, and preparation for purposes of prosecution.

Course Pre-requisite(s)
Completion of CRJ131 Intro Law Enf & Crim Just, with a grade of C or better.

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
10

Academic Level
Undergraduate

General Education Category
Social Sciences

Michigan Transfer Agreement (MTA) Category
Category 4: Social Sciences - Applied Degrees, Category 4: Social Sciences - Transfer Degrees

Goals, Topics, and Objectives

Core Course Topics

1. Criminal Investigation: An Overview
2. Writing Effective Reports
3. Crime Scene Search
4. Forensic/Physical Evidence
5. Obtaining Information
6. "Modus Operandi"
7. Identifying and Arresting Subjects
8. Homicide Investigation
9. Crimes Against Children
10. Search Warrants
11. Line-ups

Identify the early pioneers of the science of investigations.

Apply Inductive and Deductive Reasoning skills to crime scene investigations.

Identify and define the nature of a crime

Analyze the characteristics of a good/bad police report.

Explain what is meant by the corpus delecti of a crime.

Explain the Exclusionary Rule of Evidence.

Explain Geographic Profiling.

Describe the evolution of the Exclusionary Rule.

Explain the silver platter doctrine.

Differentiate between the different types of evidentiary hearings.

Define Rapport.

Distinguish between Interrogations and Interviews.

Distinguish between Confessions and Admissions.

Recognize the differences between the Crime Scene Search Methods.

Define modus operandi.

Analyze how "modus operandi" can assist in identifying and apprehending a suspect.

Describe proper procedures when arresting an individual.

Describe the various postmortem changes occurring at the time of death.

Outline the priorities of a homicide scene.

Identify types of child molesters.

Categorize different types of child abuse.

Examine the requirements for a Search Warrant.

Analyze the 10 exceptions to a Search Warrant.

Describe proper rules of a line-up procedure.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Students will be assessed by completing 3 written, multiple-choice exams. They will also perform in class written assignments.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for CRJ 134

CRJ135 - Juvenile Justice

Overview

Subject
Criminal Justice

Academic Department
Social Sciences

School
Liberal Arts

Course Description
Covers the legal and philosophical basis of the juvenile justice process along with a review of the juvenile court procedures in Michigan. Discusses problems related to delinquency and its control.

Course Pre-requisite(s)
Completion of CRJ131 Intro Law Enf & Crim Just, with a grade of C or better.

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
10

Academic Level
Undergraduate

General Education Category
Social Sciences

Michigan Transfer Agreement (MTA) Category
Category 4: Social Sciences - Applied Degrees, Category 4: Social Sciences - Transfer Degrees

Goals, Topics, and Objectives

Core Course Topics

1. Childhood and Delinquency
2. Nature and Extent of Delinquency
3. Individual Views of Delinquency
4. Sociological Views of Delinquency
5. Developmental Views of Delinquency
6. Gender and Delinquency
7. Family and Delinquency
8. Peers and Delinquency
9. Schools and Delinquency
10. Drug use and Delinquency
11. Police Work with Juveniles
12. Juvenile Court Process

Define the term juvenile delinquency.

Identify major components in the study of delinquency.

Identify the different methods used to measure delinquency.

Identify the different correlates of delinquency.

Describe the Choice and Trait theories as they relate to a study of juvenile delinquency with emphasis on individual choice.

Describe the Social Structure Theories which seek to explain the onset of delinquency.

Describe the Social Process Theories which attempt to explain juvenile delinquency and compare to Social Structure Theories.

Describe the Life Course View and how it relates to the development of juvenile delinquency.

Describe the Latent Trait View and the General Theory of Crime.

Identify the main points of the Gender and delinquency relationship.

Describe the impact of socialization on the relationship between Gender and delinquency.

Identify the main points of the Family and delinquency relationship.

Identify the main points of the effect of divorce as it effects delinquency.

Describe the main points of the relationship of peers and delinquency.

Describe the influence of Gang theory.

Describe the role of schools in the development of delinquency patterns.

Describe the relationship between academic performance and delinquency.

Identify the most commonly abused drugs by teenagers and youth today.

Analyze the relationship between drug use and delinquency.

Describe the main concepts of the interconnection between Police Work and Juveniles.

Identify the factors which may influence how Police interact with juveniles.

Identify the main components of formal juvenile court processes.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
The primary method to assess the achievement of the learning objectives for the course will be written exams utilizing multiple choice and written essay.
Texts
Criminal Law, Samaha, Joel West Pub. 7, ed. and materials. Handouts from Instructor supplementing the text: Critical Thinking Formats, Course Syllabus

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for CRJ 135

CRJ136 - Introduction to Corrections

Overview

Subject
Criminal Justice

Academic Department
Social Sciences

School
Liberal Arts

Course Description
Explores the history and philosophy of corrections. Covers probation, parole, and the impact of prisoner rights law on the system as a whole.

Course Pre-requisite(s)
Eligible to take ENG courses at HFC.

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
10

Academic Level
Undergraduate

General Education Category
Social Sciences

Michigan Transfer Agreement (MTA) Category
Category 4: Social Sciences - Applied Degrees, Category 4: Social Sciences - Transfer Degrees

Goals, Topics, and Objectives

Core Course Topics

1. Corrections and other criminal justice components
2. Correction philosophy
3. Types of punishment in corrections: historical and modern
4. U.S. prison population growth
5. Treatment programs in prison
6. Legal rights of prisoners
7. Women in prison
8. Administration and operation of jails
9. Community corrections
10. Probation and parole
11. Juvenile corrections

Identify the three components of the criminal justice system.

Analyze how the components systems combine to form a system of the criminal justice.

Discuss the philosophy of corrections.

Analyze how types of punishment imposed by criminal justice systems changed over the course of history.

Explain the major contributing factors to the population growth in U.S. prisons.

Identify the various types of treatment programs that are commonly available in prison.

Describe the ways prisoners rights have evolved over the past four decades.

Explain the numerous differences between the women and men prison.

Identify the major problems in the administration and operation of prison and jail systems.

Discuss the philosophy of community corrections.

Discuss the pro-con differences of community corrections.

Explain the major differences between probation and parole.

Describe the difference between probation and parole officers.

Explain the major difference between corrections for adults and corrections for juveniles.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
The primary method to assess the achievement of learning objectives will be written exams (multiple choice and a written essay). Students will also prepare a 2-4 page essay on the types of punishment and treatment programs within U.S. prisons. This essay will also incorporate ethics, ethical behavior, and contrasting race, education, and economics and its impact on corrections.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for CRJ 136

CRJ138 - Probation and Parole

Overview

Subject
Criminal Justice

Academic Department
Social Sciences

School
Liberal Arts

Course Description
Covers treatment of convicted law violators by correctional field services before and after prison, analysis of the role of probation and parole officers, and evaluation of community resources applied to the correctional task.

Course Pre-requisite(s)
Completion of CRJ136 Introduction to Corrections, with a grade of C or better.

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
10

Academic Level
Undergraduate

General Education Category
Social Sciences

Michigan Transfer Agreement (MTA) Category
Category 4: Social Sciences - Applied Degrees, Category 4: Social Sciences - Transfer Degrees

Goals, Topics, and Objectives

Core Course Topics

1. Probation and Parole in the Criminal Justice System
2. History of Probation and Parole
3. Parole Administration and Services
4. Probation and Juvenile Justice
5. Treatment Theories and Practices
6. Probation and Parole Agents
7. Supervision Roles and Responsibilities
8. Special Issues Impacting Probation and Parole
9. Future of Probation and Parole

Differentiate between Probation and Parole.
Describe the main theories of punishment.
Identify the three components of the Criminal Justice System.
Describe the History of Probation.
Explain the various conditions of Probation.
Examine various factors which contribute to the granting of Probation.
Differentiate between Pre/Post Sentencing Report.
Present some of the criticisms of the Pre/Post Sentencing Reports.
Outline sentencing guidelines procedures.
Distinguish between the Juvenile and Adult Court Systems.
Describe the history of the Juvenile Court System.
Examine some of the U.S. Supreme Court decisions regarding treatment of Juveniles in the Criminal Justice System.
Explain the main treatment theories of Probation and Parole.
Identify the different tasks of Probation and Parole Officers.
Analyze the different roles of Probation and Parole Agents.
Explain some of the legal issues impacting these agents.
Define Supervision.
Explain the use of Classifications and Risk Assessment in Probation and Parole.

Describe the Probation/Parole violation process.

Examine legal decisions which impact the Probation/Parole process.

Explain what is meant by specialized caseloads.

Explain the Community role in the success of Probation/Parole Client.

Define the concept of Restorative Justice.

Explain how increased usage of computer technology will impact the Correction agencies.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Students will be given several multiple choice, true/false, and short answer essays. Passing grade must be at least 70%. Students must also perform a short oral presentation to the class on a self-directed topic of interest pertaining to Probation or Parole.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for CRJ 138

CRJ140 - Identity Theft: Prevention and Awareness

Overview

Subject
Criminal Justice

Academic Department
Social Sciences

School
Liberal Arts

Course Description
Provides an overview of the identity theft problem in America. Includes current statistics from around the nation, profiles of specific cases, various prevention techniques, and steps to take if victimized.

Course Pre-requisite(s)
Completion of CRJ131 Intro Law Enf & Crim Just, with a grade of C or better.

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
10

Academic Level
Undergraduate

General Education Category
Social Sciences

Michigan Transfer Agreement (MTA) Category
Category 4: Social Sciences - Applied Degrees, Category 4: Social Sciences - Transfer Degrees

Goals, Topics, and Objectives

Core Course Topics

1. Overview: Identity Theft
2. Technology and the Information Age
3. How Identity Thieves Steal
4. Your Social Security Number
5. False Identification
6. If You Become a Victim
7. Identity Theft in the Workplace
8. Prevention Strategies

Define Identity Theft.

List 5 types of Identity Theft.

Identify some of the low/high tech methods utilized by identity thieves.

Describe some of the modus operandi of identity thieve.

Define Phishing.

Differentiate between the four main stakeholders to combat Identity Theft.

Define Information Storage Facilities.

Explain the globalization of identity theft.

Examine institutional solutions for combating identity theft.

Describe some of the common ways thieves obtain personal identification.

Differentiate between types of theft.

Explain the Social Security Numbering System.

Explain Real ID Act.

Explain State and Federal Laws pertaining to Identity Theft.

Compare and contrast counterfeit and fraudulent identification.

Present the steps to take if you become a victim of Identity Theft.

Outline an action plan for victims of identity theft.

Explain the importance of documentation.

Explain the financial ramifications of identity theft.

Define the concept of "data mining".

Explain the concept of "skimming".

Distinguish between "legal" and "private" prosecutions.

Identify several anti-theft identification devices utilized in retail security.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
The primary method to assess the achievement of the Learning Objectives will be several written multiple-choice exams. Additionally, students will submit a written Action Plan outlining the steps to follow if they become a victim of Identity Theft.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for CRJ 140

CRJ234 - Criminalistics: Criminal Investigation

Overview

Subject
Criminal Justice

Academic Department
Social Sciences

School
Liberal Arts

Course Description
Offers laboratory experience in the fundamentals of investigation, including fingerprinting techniques and the examination of hair, fiber, glass, firearms, and tool marks.

Course Pre-requisite(s)
Completion of CRJ131 Intro Law Enf & Crim Just with a grade of C or better

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
15

Academic Level
Undergraduate

General Education Category
Social Sciences

Michigan Transfer Agreement (MTA) Category
Category 4: Social Sciences - Applied Degrees, Category 4: Social Sciences - Transfer Degrees

Goals, Topics, and Objectives

Core Course Topics

- History and Development of Forensic Science Photography
- Processing the Crime Scene
- Common Types of Physical Evidence
- The Significance of Physical Evidence
- The Metric System
- DNA
- Fingerprints
- The Microscope and Trace Evidence
- Firearms, Tool Marks and Other Impressions
- Serology and Blood Splatter
- Examination of Grass and Soil

Explain prominent European and American criminalists contributions to crime scene investigations

Describe the basic organization of a Forensic Crime Lab

Explain the role of a microscope in a Crime Lab

Illustrate proper photographic techniques to be used at crime scenes*

Explain the primary responsibilities of an Investigator at a crime scene

Describe several types of crime scene search methods

Explain the concept of "chain of custody" of evidence

Identify the different types of physical evidence

Present the proper techniques in packaging different types of physical and trace evidence

Define "individual" and "class" characteristics of physical evidence

Explain the difference between the identification and comparison of physical evidence

Convert English measurements into the Metric System

Describe the parts of nucleotide and how they are linked together to make DNA

Explain the difference between nuclear DNA and mitochondrial DNA

Differentiate between the 3 basic fingerprint patterns

Analyze the impact of fingerprints on the investigation of a crime and subsequent court prosecution*

Identify several ridge characteristics on a fingerprint

Identify the parts of a microscope
Describe the 3 phases of hair growth
Explain general firearms impressions
Explain the "lands and grooves" in firearm identification
Interpret blood splatter designs*
Define physical and chemical properties
Compare metric and English units: length, volume, and mass

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
The primary method of assessing the achievement of the learning objectives will be written exams (multiple choice and essay, with a passing score of 70%). Additionally, students will perform numerous practical application "hands-on" exercises in class.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for CRJ 234

CRJ251 - Criminal Law

Overview

Subject
Criminal Justice

Academic Department
Social Sciences

School
Liberal Arts

Course Description
A study of the basic elements of criminal law with particular emphasis on definitions of Michigan crimes.

Course Pre-requisite(s)
Completion of CRJ131 Intro Law Enf & Crim Just, with a grade of C or better.

Credit Hours
4

Total Contact Hours
Total Instructor Contact Hours:
62

Total Student Contact Hours:
62

Course Fee
10

Academic Level
Undergraduate

General Education Category
Social Sciences

Michigan Transfer Agreement (MTA) Category
Category 4: Social Sciences - Applied Degrees, Category 4: Social Sciences - Transfer Degrees

Goals, Topics, and Objectives

Course Goals
1. To identify and describe the various relationships between the criminal law and the needs of society.
2. To learn the basic principles of the criminal law in various categories, e.g., definition of criminal offense, defenses, standards of use.
3. Explain the relationship of knowledge of the criminal law as a vital part of professional law enforcement.
4. To develop the thought-process of critical thinking problem-solving in criminal law situations. Exercises will be assigned to identify the aspects of critical thinking through emphasis on clarity of thought and objective evaluation to support conclusions

Core Course Topics
1. Criminal Law and Criminal Punishment
2. Constitutional Limits on Criminal Law
3. Actus Reus
4. Mens Reus, Concurrence, Causation
5. Defenses, Justifications
6. Defense, Excuses
7. Parties to Crime
8. Inchoate Crimes
9. Murder and Manslaughter
10. Criminal Sexual Conduct, Bodily Injury Crimes
11. Crimes Against Property

Identify non legal influences on the development of English/American criminal law.
Identify the sources of American Criminal Law.
Describe the basic theories of punishment.
Identify the major Constitutional limits on the use of the Criminal Law.
Describe the use of briefs in legal studies and complete various briefs demonstrating the accepted technique.
Apply the technique of critical thinking as espoused in criminal law classes.
Describe the concept of Actus Res.
Identify the 4 basic categories of Actus Res.
Describe the concept of Mens Rea.
Identify and describe the types of Mes Rea.
Examine the concept of causation and how it relates to criminal liability.
Identify the elements of the defense of self-defense, defense of others, defense of home and property.
Identify the elements of the Choice of Evils" defense.
Identify the elements of the defense of consent.
Identify the tests use to determine Criminal Insanity.

Identify the elements of the defense of Age, Duress, Intoxication and Entrapment.

Identify the component parts of Accomplice Liability and describe how the law identifies the basis for aider and abettor liability.

Explain the difference between accomplice liability and vicarious liability.

Identify the elements of the 3 basic inchoate crimes: Attempt, Conspiracy and Solicitation.

Explain how the elements are different in application to a court room case.

Identify the elements and distinguish between Murder and Manslaughter.

Analyze the different degrees of homicide in the State of Michigan.

Describe the differences between common law rape and Michigans criminal sexual conduct statues.

Identify the main categories of CSC in Michigan and describe the elements for each.

Distinguish between the 4 basic categories of Assault in Michigan.

Identify the main categories of Theft crimes, both in the common law and under Michigan law.

Compare and contrast the various types of theft crime.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement

1. Multiple Choice questions:
    - Students will be presented 20 multiple-choice questions on each of 5 quizzes over the course of the semester.
    - The quizzes will cover two chapters of text.
2. Problem Solving essays:
    - Essays will be used on all quizzes during the semester.
    - Essays will require the student to evaluate and analyze fact patterns.
    - Students will be required to apply to correct standard of law to these fact patterns.
    - Students will be required to reach a legal conclusion based upon their application of the law and their analysis.
3. Written Homework Assignment:
    - Written homework assignments will be accomplished by the student based on the critical thinking objective
    - The assignment will be done outside the classroom.
    - The subject matter of the problem-solving homework assignment will be drawn from classroom material.

Texts
Criminal Law, Samaha, Joel Thomson-Wadsworth. 8th ed. Handouts supplementing the text.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for CRJ 251

CRJ252 - Criminal Procedure

Overview

Subject
Criminal Justice

Academic Department
Social Sciences

School
Liberal Arts

Course Description
Expands on the concepts presented in CRJ 251, emphasizing criminal procedure, including the laws of arrest and search and seizure, the rights of the accused; and the roles of the prosecutor, judge, jury and defense counsel in the judicial process. Also discusses both Michigan and federal constitutional issues.

Course Pre-requisite(s)
Completion of CRJ251 Criminal Law, with a grade of C or better

Credit Hours
4

Total Contact Hours

Total Instructor Contact Hours:
62

Total Student Contact Hours:
62

Course Fee
10

Academic Level
Undergraduate

General Education Category
Social Sciences

Michigan Transfer Agreement (MTA) Category
Category 4: Social Sciences - Transfer Degrees, Category 4: Social Sciences - Applied Degrees

Goals, Topics, and Objectives

Core Course Topics

1. Crime Control in a Constitutional Democracy
2. Criminal Procedure and the Constitution
3. Michigan Court System
4. Searches and Seizures
5. Stop and Frisk
6. Arrest
7. Searches for Evidence
8. Special Needs Searches
9. Self Incrimination
10. Identification Procedures
11. Exclusionary Rule and Entrapment

Describe the balancing of community security and individual autonomy.

Describe the graduated objective basis requirement.

Write appropriate legal briefs.

Utilize legal rules to analyze legal fact patterns and reach legal conclusions based on those rules of law.

Describe the working procedures in the Michigan court system.

Trace the progress of a criminal case as it moves through the court system.

Describe the meaning of Due Process of Law.

Explain how the Incorporation Doctrine relates to Due Process.

Describe the meaning of Equal Protection of Law.

Apply the different tests use to analyze an Equal Protection case.

Describe the concept of Search and Seizure in law enforcement.

Identify the basic constitutional aspects that influence Search and Seizure.

Use the constitutional aspects to analyze search and seizure problems.

Describe the use of Stop and Frisk concepts as they drive from the 4th Amendment to the US Constitution.

Describe the proper scope of a Stop and Frisk.

Analyze situations and decide if a Stop and Frisk is constitutional in those situations.

Identify the basic constitutional restrictions on arrest.

Analyze situations to decide when and if a warrant is needed to make an arrest.

Describe the constitutional restrictions on the use of force when making an arrest

Identify the chief constitutional restraints on searches for evidence.

Identify the exceptions to the warrant requirement.

Analyze fact patterns and be able to determine if a search is reasonable using the constitutional restraints.

Identify the unique rules that apply to special needs searches.

Describe the special needs searches and be able to describe what makes them reasonable under the 4th Amendment.

Identify the constitutional rules that apply to interrogations.

Describe the reasoning behind the rules evolving out of Miranda v. Arizona.

Evaluate factual situations to determine if the rules of Miranda apply.

Identify the different types of identification procedures used by law enforcement.

Identify the constitutional requirements of each procedure for admission into evidence.

Explain the justifications for the Exclusionary Rule and for its application.

Identify the exceptions to the Exclusionary Rule.

Analyze a factual scenario to determine if one of the exceptions applies.

Describe the defense of entrapment.

Apply the two tests used in entrapment cases.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
1. Multiple – Choice questions:

- Students will be presented 20 multiple-choice questions on each of 5 quizzes over the course of the semester.
- The quizzes will cover two chapters of text.

2. Problem Solving essays:

- Essays will be used on all quizzes during the semester. Essays will require the student to evaluate and analyze fact patterns.
- Students will be required to apply to correct standard of law to these fact patterns.
- Students will be required to reach a legal conclusion based upon their application of the law and their analysis.

3. Written Homework Assignment:

- Written homework assignments will be accomplished by the student based on the critical thinking objective.
- The assignment will be done outside the classroom.
- The subject matter of the problem-solving homework assignment will be drawn from classroom material

Texts
Criminal Procedure, Samaha, Joel. Thomson-Wadsworth. 6th Ed. Handouts supplementing the text.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for CRJ 252

CRJ285 - Topics in Criminal Justice/Law Enfor

Overview

Subject
Criminal Justice

Academic Department
Social Sciences

School
Liberal Arts

Course Description
An exit course covering a series of critical issues facing law enforcement personnel. Examines the diverse roles of the public police and how to achieve effective community policing.

Course Pre-requisite(s)
Completion of CRJ131 Intro Law Enf & Crim Justwith a grade of C or better, and completion of one 3-credit hour class in Criminal Justice with a grade of C or better

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
10

Academic Level
Undergraduate

General Education Category
Social Sciences

Michigan Transfer Agreement (MTA) Category
Category 4: Social Sciences - Applied Degrees, Category 4: Social Sciences - Transfer Degrees

Goals, Topics, and Objectives

Core Course Topics

1. The evolution of community policing
2. Understanding mission and culture
3. Understanding and involving the community
4. Problem solving: proactive policing
5. Implementing community policing
6. Communicating with a diverse population
7. The challenge of gangs
8. Forming partnerships with the media
9. Building partnerships in the community

Analyze the Community Policing Philosophy.

Explain the differences between the 3 areas of policing.

Distinguish between community, human, and police relations.

Explain the bowling alone phenomenon.

Distinguish between formal and informal power structures in a community.

Proactive Policing.

Distinguish between effective and efficient policing.

Define vision and mission statements.

Develop a vision and mission statement for a police department.

Develop a police response strategy to reduce crime in a community.

Explain the contexts in which culture and ethnocentrism are relevant in law enforcement.

Apply the concepts of prejudice and stereotyping to everyday police work.

Distinguish between the two critical barriers of communication in a diverse society.

Describe a youth gang.

Describe the demographics of a typical gang member.

Identify the common goal of the police and the media.

Describe how police officers can improve relations with the media.

Describe the 4 dimensions of trust.

Identify what must be recognized when forming partnerships.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
There will be two methods to assess the course objectives of this class: Two written multiple-choice exams. A 5-6 page written, critical thinking scenario-based assignment.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for CRJ 285

CRJ287 - Police Academy

Overview

Subject
Criminal Justice

Academic Department
Social Sciences

School
Liberal Arts

Course Description
Covers the proper techniques of investigation, crime scene process, patrol procedures, operations and techniques. Emphasizes conflict mediation, report writing, and detention and prosecution of prisoners. First aid, investigations, evidence collection, disaster control, civil disorders and tactical operations will also be covered.

Course Pre-requisite(s)
Instructor Permission

Credit Hours
21

Total Contact Hours
Total Instructor Contact Hours:
330

Total Student Contact Hours:
330

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Introduction to Investigation
2. Substantive Criminal Law
3. Criminal Procedures
4. Investigation
5. Court Functions and Criminal Law
6. Crime Scene Processing
7. Child Abuse and Neglect Investigations
8. Patrol Procedures
9. Ethics In Policing and Interpersonal Relations
10. Organization and Management
11. Report Writing
12. Juvenile Law
13. Detention and Prosecution
14. Police Skills
15. First Aid
16. Fitness and Wellness
17. Traffic Laws and Investigation
18. Emergency Preparedness/Disaster Control

Demonstrate an understanding of investigation, including constitutional law, criminal procedure, types of investigation, court functions and civil law, the crime scene process, and special investigations.*

Demonstrate an understanding of patrol procedures, including patrol procedures, interpersonal relations and conflict mediation, patrol techniques, report writing, and dealing with juveniles and their families.*

Demonstrate an understanding of detention and prosecution, including receiving and booking, case prosecution, and the civil process.

Perform the required skills of a police officer in the areas of first aid, use and care of firearms, and physical skills such as the mechanics of arrest and search, police tactical techniques, defensive tactics, and driving.

Demonstrate an understanding of the various aspects of traffic control, including the motor vehicle law, vehicle stops, traffic control and enforcement, operating under the influence of liquor and motor vehicle accident investigation.

Demonstrate an understanding of special operations, including emergency preparedness/disaster control, civil disorders, and tactical operations.

Recite the law enforcement officer's code of ethics by the 15th day of class.

Pass a state-mandated physical training exit test prior to successful completion of the police academy.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Students must successfully take and pass all exams as directed by the Director of the Police Academy at Schoolcraft Community College.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for CRJ 287

CRJ291 - Criminal Justice Internship 1

Overview

Subject
Criminal Justice

Academic Department
Social Sciences

School
Liberal Arts

Course Description
This is an internship program that provides the student with field experience with municipal, county, state, and local criminal justice agencies and related agencies in the private sector. This includes but is not limited to: District, Circuit, and Juvenile Courts, halfway houses, detention centers, local, county and state police agencies, the FBI, U.S Marshall Service, Drug Enforcement Agency and Homeland Security. The internship is available to students in both the Probation/Corrections and Parole and the Criminal Justice programs. Students will perform all of the duties of professionals in the given area at the staff level. Students will not have arrest authority or be authorized to carry guns but may accompany a ride along, shadow criminal justice personnel, work in crime labs, interview probation clients, and perform other administrative work. Students will receive hands on experience in their chosen field working alongside with and performing the duties of criminal justice professionals.The internship requires a minimum of 9 hours of work each week off campus at a criminal justice site. Students are also required to meet on campus with the HFC faculty member on a weekly basis by arrangement. This class can only be taken once.

Course Pre-requisite(s)
GPA of 2.8, Completion of 12 hours of CRJ courses, and written consent of CRJ director before registration.

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
3

Total Student Contact Hours:
140

Course Fee
10

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Professional and ethical behavior in a criminal justice environment.
2. Interacting and relating to a variety of groups within the criminal justice sphere, including proper use of terminology.
3. Correspondence and reports in a criminal justice environment.
4. Common on the job issues in a criminal justice environment.
5. Appropriate methods for logging activity and assignments in a criminal justice environment.
6. Standards for professional behavior and performance in a criminal justice environment.

Demonstrate professional behaviors, especially ethical behaviors using guidelines established by the host agency.

Demonstrate how to interact with multiple groups, including government agencies, court house personnel, and related entities in the private sector.

Create a variety of appropriate and accurate written notes and reports including, but not limited to, e-mail, agendas, and short reports (need specific examples of types).

Identify issues related to the preservation of peace, the prevention of crime, and the protection of life and property.

Create appropriate records and documentation logs of daily assignments and activities to host agency standards.

Self assess on the job performance and professional behaviors.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Students will meet with the HFC adviser for 30 minutes every two weeks to discuss progress and review documentation of the internship experience as well as any issues/concerns. Student may be asked to prepare a short report, or other activity, to bring to the meetings. Each student is required to write a portfolio quality terminal report describing what they learned during the internship. Report must also analyze strengths and weakness of the behavior demonstrated on the job; assess effectiveness of interactions with employees; The HFC adviser will contact the local law enforcement agency to determine student success based on the agreed upon learning outcomes.

Texts
For a list of required course materials contact the Criminal Justice lead instructor.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for CRJ 291

CRJ292 - Criminal Justice Internship 2

Overview

Subject
Criminal Justice

Academic Department
Social Sciences

School
Liberal Arts

Course Description
This is a continuation of the internship started in CRJ-291 and can only be taken as part of a year-long internship. Students will continue to gain field experience with municipal, county, state, and local criminal justice agencies and related agencies in the private sector. This includes but is not limited to: District, Circuit, and Juvenile Courts, halfway houses, detention centers, local, county and state police agencies, the FBI, U.S Marshall Service, Drug Enforcement Agency and Homeland Security. The internship is available to students in both the Probation/Corrections and Parole and the Criminal Justice programs. Students will perform all of the duties of professionals in the given area at the staff level. Students will not have arrest authority or be authorized to carry firearms but may accompany a ride along, shadow criminal justice personnel, work in crime labs, interview probation clients, and perform other administrative work. Students will receive hands on experience in their chosen field working alongside with and performing the duties of criminal justice professionals.The internship requires a minimum of 9 hours of work each week off campus at a criminal justice site. Students are also required to meet on campus with the HFC faculty member on a weekly basis by arrangement. This class can only be taken once.

Course Pre-requisite(s)
Successful completion of CRJ291 Criminal Justice Internship 1and written consent of CRJ director before registration

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
3

Total Student Contact Hours:
140

Course Fee
1

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Professional and ethical behavior in a criminal justice environment.
2. Interacting and relating to a variety of groups within the criminal justice sphere.
3. Correspondence and reports in a criminal justice environment.
4. Common on the job issues in a criminal justice environment.
5. Appropriate methods for logging activity and assignments in a criminal justice environment.
6. Standards for professional behavior and performance in a criminal justice environment.

Demonstrate professional behaviors, especially ethical behaviors using guidelines established by the host agency.

Demonstrate how to interact with multiple groups, including government agencies, court house personnel, and related entities in the private sector.

Create a variety of appropriate and accurate written notes and reports including, but not limited to, e-mail, agendas, and short reports (need specific examples of types).

Identify issues related to the preservation of peace, the prevention of crime, and the protection of life and property.

Create appropriate records and documentation logs of daily assignments and activities to host agency standards.

Self-assess on the job performance and professional behaviors.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement

1. Students will meet with the HFC adviser for 30 minutes every two weeks to discuss progress and review documentation of the internship experience as well as any issues/concerns.
2. Student may be asked to prepare a short report, or other activity, to bring to the meetings.
3. Each student is required to write a portfolio quality terminal report describing what they learned during the internship. Report must also analyze strengths and weakness of the behavior demonstrated on the job; assess effectiveness of interactions with employees; The HFC adviser will contact the local law enforcement agency to determine student success based on the agreed upon learning outcomes.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for CRJ 292

DNCA121 - Beginning Tap

Overview

Subject
Fine and Performing Arts

Academic Department
Fine & Performing Arts

School
Liberal Arts

Course Description
Introduces the basic rhythms, steps, and simple combinations of tap, a dance form derived from a combination of syncopated African rhythms, Irish clogging and folk dance. First class meeting discusses proper footwear.

Course Pre-requisite(s)
Eligible to take ENG courses at HFC.

Credit Hours
2

Total Contact Hours

Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
10

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
Determined by department.

Goals, Topics, and Objectives

Course Goals
To be able to correctly identify and execute basic tap steps and rhythms with correct technique. , basic_html

Core Course Topics

1. Vocabulary of basic steps
2. Combinations
3. Rhythm and musicality
4. Postural Alignment/Weight Changing
5. Famous tap dancers

Identify vocabulary of basic steps.

Execute basic tap steps with correct technique.

Execute skill in given combinations and in composing combinations.

Distinguish among given rhythms.

Execute all steps and combinations with accurate musicality and timing.

Execute body alignment exercises and apply to balancing with weight changes.

List and explain contributions of selected celebrated tap dancers of the 20th century.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement

1. Movement exams: identify vocabulary of steps from given demonstrations; and execute basic tap steps with correct technique and clear sounds.
2. Movement exam: execute given combinations with clarity and accuracy. Assignment: Compose combinations of steps with clarity.
3. Written exam: distinguish and identify rhythms from given recordings. Movement exams: execute all steps and combinations with accurate musicality and timing.
4. Movement exam: illustrate tap sound accuracy through balance in shifting and changing weight.
5. Assignment: oral, written and video or Power Point presentations of selected famous tap dancers of the 20th century.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for DNCA 121

DNCA131 - Beginning Latin and Ballroom Dance

Overview

Subject
Fine and Performing Arts

Academic Department
Fine & Performing Arts

School
Liberal Arts

Course Description
Provides the basics of ballroom in the American and International styles in a group setting. Students will be able to recognize and execute basics of American Smooth and International Standard styles of Waltz, Foxtrot, Cha Cha, Rumba and East Coast Swing. Technique, rhythms and leading and following are studied and practiced.

Course Pre-requisite(s)
Eligible to take ENG courses at HFC.

Credit Hours
2

Total Contact Hours

Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
10

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
Determined by department.

Goals, Topics, and Objectives

Course Goals
To help students learn the basic patterns of Cha Cha, Rumba and East Coast Swing; Latin dances and Waltz and Foxtrot Ballroom dances, individually and with a partner.

Core Course Topics

1. Basics of American and International Styles of Selected Dances
2. Rhythm
3. Alignment, Technique and Dance Position
4. Leading and Following
5. Space

Execute basic patterns of Cha Cha, Rumba, East Coast Swing, Waltz and Foxtrot in American and International Styles.

Execute movement accurately with music rhythmic patterns.

Analyze the difference between each Ballroom and Latin dance position, alignment and technique.

Demonstrate alignment of the body and find the center of gravity individually and with a partner in each dance style.

Demonstrate receiving and giving weight with a partner.

Execute mirroring as a pair and individually.

Execute each dance style in the appropriate spatial patterns and throughout the general dance space.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement

1. Movement Exam: demonstrate given basics of all styles.
2. Movement Exam: demonstrate movement connection of each dance style with the music rhythmic patterns. Written Exam: demonstrate knowledge of music, rhythm, terms and structure.
3. Movement Exam: execute all dances with correct technique, alignment, placement and dance position.
4. Movement Exam: execute with a partner smooth leading and following with accurate musicality.
5. Written and Movement Exam: demonstrate knowledge of floor patterns and use of general space.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for DNCA 131

DNCA132 - Intermediate Latin and Ballroom Dance

Overview

Subject
Fine and Performing Arts

Academic Department
Fine & Performing Arts

School
Liberal Arts

Course Description
Continues dances learned in DNCA 131 with more complex patterns. Basics of three Latin dances, Mambo, Bolero and Jive; and two Ballroom dances, Tango and Viennese Waltz are added. Technique, rhythm, leading and following are studied and practiced.

Course Pre-requisite(s)
Eligible to take ENG courses at HFC. DNCA131 Beginning Latin & Ballrm Dance or Instructor Permission

Credit Hours
2

Total Contact Hours

Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
10

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
Determined by department.

Goals, Topics, and Objectives

Core Course Topics

1. Basics of American and International Styles of Selected Dances
2. Dances learned in DNCA-131, Cha Cha, Rumba, East Coast Swing, Waltz and Foxtrot
3. Rhythm
4. Alignment, Technique and Dance Position
5. Leading and Following
6. Space

Execute basic patterns of Latin dances, Mambo, Bolero and Jive and Ballroom dances, Tango and Viennese Waltz in both American and International Styles.

Execute given complex patterns of Cha Cha, Rumba, East Coast Swing, Waltz and Foxtrot with a partner.

Execute movement from all selected dances with rhythmic accuracy and timing.

Analyze the difference between each dance position, alignment and technique in Mambo, Bolero, Jive, Tango and Viennese Waltz individually and with a partner.*

Align the body and center of gravity individually and with a partner in each dance style selected.

Connect with a partner through weight sharing.

Execute mirroring as a pair and individually.

Execute each selected dance with appropriate spatial patterns and throughout the general dance space or line of dance.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement

1. Movement exam: Execute basics of Mambo, Bolero, Jive, Tango and Viennese as a soloist and with a partner.
2. Movement exam: Execute given complex patterns of Cha Cha, Rumba, East Coast Swing, Waltz and Foxtrot with a partner.
3. Movement exam: Execute given phrases from selected dances with rhythmic accuracy and timing.
4. Movement, oral and/or written exam: Explain the difference between each dance position, body alignment and technique of Mambo, Bolero, Jive, Tango and Viennese Waltz individually and with a partner.
5. Movement and oral exam: Execute and explain the aspects of alignment, center of gravity, weight sharing and mirroring in leading and following with a partner.
6. Movement exam: Execute each selected dance with appropriate and accurate spatial patterns in the general dance space and in the line of dance.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for DNCA 132

DNCA133 - Advanced Latin and Ballroom Dance

Overview

Subject
Fine and Performing Arts

Academic Department
Fine & Performing Arts

School
Liberal Arts

Course Description
This course continues study and practice of dances learned in DNC 132 with more complex patterns with a partner. Basics of Latin dances, Paso Doble and Samba; and a Ballroom dance, Quickstep are added. Rhythm, technique, and leading and following are studied and practiced.

Course Pre-requisite(s)
Eligible to take ENG courses at HFC. DNCA132 Intermed Latin & Ballrm Dance or Instructor Permission

Credit Hours
2

Total Contact Hours

Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
10

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
Determined by department.

Goals, Topics, and Objectives

Core Course Topics

1. Basics of American and International Styles of Selected Dances
2. Dances learned in DNCA 132
3. Rhythm
4. Alignment, Technique and Dance Position
5. Leading and Following
6. Space
7. Competition

Execute basic patterns of Latin dances, Paso Doble and Samba; and Ballroom dance, Quickstep in both American and International Styles.

Execute patterns beyond the basics of dances from DNCA-132, Mambo, Bolero, Jive, Tango and Viennese Waltz.

Execute movement from all selected dances with rhythmic accuracy and timing.

Analyze the difference between each dance position, alignment and technique in Paso Doble, Samba and Quickstep with a partner.

Align the body and center of gravity individually and with a partner in each dance style selected.

Connect with a partner through weight sharing.

Execute mirroring as a pair and individually.

Execute each selected dance with appropriate spatial patterns and throughout the general space or line of dance.

Explain levels and criteria in Latin and Ballroom competition in both American and International Styles.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement

1. Movement exam: Execute basics of Paso Doble, Samba and Quickstep.
2. Movement exam: Execute given complex patterns of Mambo, Bolero, Jive, Tango and Viennese Waltz.
3. Movement exam: Execute given phrases from selected dances with rhythmic accuracy and timing.
4. Movement, oral and/or written exam: Explain the difference between each dance position, body alignment and technique of Paso Doble, Samba and Quickstep.
5. Movement and oral exam: Execute and explain the aspects of alignment , center of gravity, weight sharing and mirroring in leading and following with a partner.
6. Movement exam: Execute each selected dance with appropriate and accurate spatial patterns in the general dance space and/or in the line of dance.
7. Class assignment, movement and written exams: Explain levels and criteria in Latin and Ballroom competition in both American and International Styles with given selected dances.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for DNCA 133

DNCA141 - Beginning Ballet

Overview

Subject
Fine and Performing Arts

Academic Department
Fine & Performing Arts

School
Liberal Arts

Course Description
Introduces ballet movement and ballet movement vocabulary in French. Fundamental barre exercises are learned through the identification, execution, and understanding of their purpose. Students will learn technique at the barre, at the centre, and through the dance space. Classical dance is recognized, learned and performed throughout the world.

Course Pre-requisite(s)
Eligible to take ENG courses at HFC.

Credit Hours
2

Total Contact Hours

Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
10

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
Determined by department.

Goals, Topics, and Objectives

Course Goals
To be able to, through the oral and written French word, correctly identify; pronounce; translate; state the purpose; and execute with correct technique, basic Ballet movement vocabulary.

Core Course Topics

1. Vocabulary
2. Technique and purpose
3. Barre alignment and technique
4. Movement combinations and phrases
5. Major contributors
6. Skeletal-muscular structures and function
7. Musicality

Identify basic Ballet movement vocabulary in French and in English from a demonstration.

Execute movement terms with correct technique and explain their purpose.

Self evaluate alignment and execute correct technique.

Distinguish and apply barre exercises to movement in combinations and phrases

Discuss a major contributor to Ballet choreography and/or dancing.

Apply knowledge of anatomical function to development of strength, endurance, balance, and flexibility needed for efficient Ballet technique.

Execute accurate musicality with all basic movement vocabulary, combinations and phrases.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement

1. Written Exam: movement identification in French and English translation from a given demonstration. Oral Exam: French pronunciation.
2. Written Exam: state and explain movement purposes. Movement Exam: technique execution from given movement vocabulary.
3. Class Log: written record of given corrections and guidance and personal evaluation of technique for self correction.
4. Movement Exam: demonstrating skill and knowledge of given combinations and phrases.
5. Choreographer/Dancer Presentation: oral, written, video class presentation of an artist.
6. Written exam: label skeletal muscular anatomy and explain the application to dance.
7. Written exam: define musical terms. Movement exam: Execute selected movement with correct musicality/rhythm/timing.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for DNCA 141

DNCA142 - Intermediate Ballet

Overview

Subject
Fine and Performing Arts

Academic Department
Fine & Performing Arts

School
Liberal Arts

Course Description
Continues the study of ballet via an expanded and more challenging movement vocabulary. More complex combinations at the barre, at the centre and through the dance space are learned. Skill is also acquired through the understanding of skeletal-muscular anatomy and function involved in dance. Care of the body and conditioning for dance is emphasized.

Course Pre-requisite(s)
DNCA141 Beginning Ballet or Instructor Permission

Credit Hours
2

Total Contact Hours

Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
10

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
Determined by department.

Goals, Topics, and Objectives

Course Goals
To develop skill with more complex combinations of Ballet movement beyond the beginning level and to condition a body that is capable of more advanced level work.

Core Course Topics

1. Vocabulary
2. Technique and purpose
3. Combinations and phrases
4. Turns
5. Ballet Artists
6. Skeletal-muscular structures and functions
7. Body conditioning
8. Musicality

Identify intermediate Ballet vocabulary in French and in English from a given demonstration.

Execute movement terms with correct technique and explain their purpose.

Execute movement combinations and phrases at the barre and at the centre.

Demonstrate skill/technique with selected turns.

Discuss a major artist/contributor to Ballet choreography or dancing.

Label and apply skeletal-muscular anatomy, function, and conditioning to dance.

Self evaluate fitness and body condition as it applies to dance skill.

Execute accurate musicality with all basic movement vocabulary, combinations and phrases.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement

1. Written Exam: movement identification in French and English translation from a given demonstration.
2. Written Exam:state and explain movement vocabulary purposes. Movement Exam: execute technique from given movement vocabulary.
3. Movement Exam: demonstrate skill/technique with given combinations and phrases.
4. Movement Exam: demonstrate skill/technique in turning.
5. Choreographer/Dancer Presentation: oral, written, video class presentation of an artist.
6. Written Exam: Identify skeletal and muscular structures and explain their function as they apply to dance movement.
7. Fitness Testing: pre and post testing for muscular endurance, strength, balance and flexibility.
8. Written Exam: define musical terms. Movement exam: Execute selected movement with correct musicality/rhythm/timing.

Texts
Ballet Basics, 5th ed., Sandra Hammond

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for DNCA 142

DNCA143 - Advanced Ballet

Overview

Subject
Fine and Performing Arts

Academic Department
Fine & Performing Arts

School
Liberal Arts

Course Description
Presents advance-level ballet concepts via more complex and challenging adagio and allegro combinations, as well as excerpts from the classical ballet repertory. Also cover career opportunities in dance, and examines an abbreviated historical perspective of the classical excerpts offered.

Course Pre-requisite(s)
DNCA142 Intermediate Ballet or Instructor Permission

Credit Hours
2

Total Contact Hours

Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
10

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
Determined by department.

Goals, Topics, and Objectives

Course Goals
To be able to correctly identify and execute advanced Ballet and selected excerpts from the classical ballet repertory.

Core Course Topics

1. Advanced movement vocabulary
2. Turns
3. Technique & Musicality in Phrases and Repertory Excerpts
4. Epaulement & Performance
5. Dance Careers
6. Choreographers of Classical Ballet

Identify advanced Ballet movement vocabulary from a demonstration.

Execute advanced turns.

Execute precise technique and musicality with advanced phrases and selected classical repertory.

Analyze choreographer's intention and demonstrate artistry through that interpretation.

List and explain dance career options.

Explain a dancer or choreographer's philosophy; and list and describe some of their work. Assessment and Requirements.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement

1. Written exam: movement identification.
2. Written exam: demonstrate skill/technique in turning.
3. Movement exam: demonstrate skill, technique and musicality of given movement vocabulary and repertory.
4. Movement exam: demonstrate artistic interpretation and performance presence.
5. Written exam: Identifying and explaining knowledge of dance careers.
6. Oral, written and video presentation of selected Ballet artist's philosophy and work.

Texts
Beyond the Basics, Sandra Hammond

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for DNCA 143

DNCA151 - Beginning Modern Dance

Overview

Subject
Fine and Performing Arts

Academic Department
Fine & Performing Arts

School
Liberal Arts

Course Description
Explores Modern Dance as an art form that has a limitless way to express oneself in human movement. Primary emphasis is on developing technique of the basic Modern movement vocabulary. Course also covers skeletal muscular anatomy and function as it applies to dance movement, and an introduction to improvisation and composition.

Course Pre-requisite(s)
Eligible to take ENG courses at HFC.

Credit Hours
2

Total Contact Hours

Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
10

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
Determined by department.

Goals, Topics, and Objectives

Course Goals
To be able to correctly identify and execute Modern dance movement vocabulary with correct technique and skill and to discover new ways to create and manipulate movement.

Core Course Topics

1. Basic Movement Vocabulary
2. Skill and Technique
3. Dance Elements
4. Modern Dance Pioneers and Current Choreographers
5. Skeletal-muscular structures and functions
6. Body Conditioning
7. Improvisation and Problem Solving
8. Musicality

Identify basic Modern Dance vocabulary from a demonstration.

Execute correct technique from given movement vocabulary.

Identify and explain the elements of Dance.

Identify selected pioneers of Modern Dance and current choreographers and explain their significance and contributions.

Label skeletal-muscular anatomy and functions as they apply to dance.

Describe fitness components of muscular endurance, strength, flexibility and balance as they apply to dance skill and assess personal improvement.

Create solutions to given movement problems through improvisation and classroom dance movement studies.

Execute all basic movement vocabulary, combinations and phrases with accurate musicality.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement

1. Written exam: identify movement vocabulary from a demonstration.
2. Class Assignment: keep a written log of technique notes and individual corrections. Movement exam: execute given movement with correct technique.
3. Written exam: list and explain the elements of dance.
4. Classroom presentation: written, oral and video presentation of selected Modern Dance artists.
5. Written exam: label skeletal-muscular anatomy and explain their functions as they apply to Dance.
6. Fitness testing: pre- and post-tests for muscle endurance, strength, flexibility and balance.
7. Class assignments and studies: create solutions to given movement problems.
8. Movement exam: execute given movement with accurate musicality. Written exam: define music terms. Class Assignment/s: create rhythmic patterns and compose movement reflecting them.

Texts
The Dancer Prepares - Modern Dance for Beginners, 5th ed., Penrod and Plastino

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for DNCA 151

DNCA152 - Intermediate Modern Dance

Overview

Subject
Fine and Performing Arts

Academic Department
Fine & Performing Arts

School
Liberal Arts

Course Description
Further explores Modern Dance as an art form that offers a limitless way to express oneself in human movement. Primary emphasis is on building beyond basic Modern movement vocabulary to more complex phrases in the center and through the dance space.

Course Pre-requisite(s)
Eligible to take ENG courses at HFC. DNCA151 Beginning Modern Danceor Instructor Permission

Credit Hours
2

Total Contact Hours

Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
10

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
Determined by department.

Goals, Topics, and Objectives

Course Goals
To be able to correctly identify and execute Modern Dance vocabulary beyond the basics with correct technique and skill and to demonstrate skill in movement phrases.

Core Course Topics

1. Movement Vocabulary
2. Technique
3. Modern Dance Pioneers and Current Choreographers
4. Skeletal-muscular Structures and Functions
5. Body Conditioning
6. Improvisation and Choreography
7. Musicality

Identify intermediate Modern Dance vocabulary.

Execute movement combinations and phrases at the intermediate level with correct technique.

Explain the contributions and philosophy of a Modern Dance pioneer or current artist.

Label and apply skeletal-muscular anatomy and functions as they apply to dance.

Describe fitness components of muscular endurance, strength, flexibility and balance as they apply to dance skill.

Compose movement phrases through improvisation and movement manipulation as a soloist, with a partner or in a small group.

Create and perform movement phrases with accurate rhythmic patterns.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement

1. Written exam: identify movement from a demonstration.
2. Movement exam: execute all given movement with correct technique.
3. Classroom presentation: oral, written and video presentation from a selected Modern Dance artist.
4. Written exam: identify skeletal-muscular structures and explain their functions and application to Dance.
5. Written exam: define and explain some components of physical fitness. Fitness testing: pre and post testing for endurance, strength, balance and flexibility to evaluate improvement.
6. Class Assignment/s: compose movement studies by employing improvisation and movement manipulation.
7. Movement exam: execute movement with accurate musicality.

Texts
The Dancer Prepares-Modern Dance for Beginners, 5th ed., Penrod and Plastino

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for DNCA 152

DNCA153 - Advanced Modern Dance

Overview

Subject
Fine and Performing Arts

Academic Department
Fine & Performing Arts

School
Liberal Arts

Course Description
Explores the finer points of Modern Dance. Primary emphasis is on performing advanced movement phrases along with the study and practice of specific Modern Dance techniques. Course also supports the development of choreographic skill and stage presence.

Course Pre-requisite(s)
Eligible to take ENG courses at HFC. DNCA152 Intermediate Modern Dance or Instructor Permission

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
10

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
Determined by department.

Goals, Topics, and Objectives

Course Goals
To be able to execute advanced Modern Dance movement with correct technique and skill; develop choreographic skill; and improve stage presence and performance.

Core Course Topics

1. Advanced Movement Vocabulary
2. Modern Dance Techniques
3. Musicality
4. Modern Dance Choreographers
5. Composition
6. Dance Careers

Identify advanced Modern Dance movement vocabulary from a demonstration.

Explain and illustrate skill in selected Modern Dance techniques, e.g. Graham, Limon.

Execute movement phrases with musicality, accurate rhythm and timing.

Explain a Modern Dance choreographer's philosophy; and list and describe their works.

Compose movement phrases, dance studies and sections by employing improvisation and choreographic tools.

List and explain dance career options.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement

1. Written exam: identify movement vocabulary from a demonstration.
2. Movement exam: Execute with accurate technique given movement phrases. Written exam: Explain given Modern Dance techniques and philosophies.
3. Movement exam: demonstrate movement phrases with accurate musicality, rhythm and timing.
4. Classroom presentation: Oral, written and video presentation of selected Modern Dance choreographers.
5. Classroom assignment/s: Compose movement phrases and/or sections of a dance, given the specific focus or theme.
6. Classroom assignment: List and explain various dance career options.

Texts
A Creative Habit, Twyla Tharp

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for DNCA 153

DNCA161 - Beginning Jazz Dance

Overview

Subject
Fine and Performing Arts

Academic Department
Fine & Performing Arts

School
Liberal Arts

Course Description
Explores theatre style jazz dance. Primary emphasis is on developing knowledge of and experience in basic jazz movement vocabulary and technique accompanied by jazz and popular music. Course also includes study of music rhythms, a brief history of jazz, and the body instrument from an anatomical perspective.

Course Pre-requisite(s)
Eligible to take ENG courses at HFC.

Credit Hours
2

Total Contact Hours

Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
10

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
Determined by department.

Goals, Topics, and Objectives

Course Goals
To be able to identify and execute basic movement vocabulary with correct technique and skill in the Jazz genre.

Core Course Topics

1. Warm up and Isolations
2. Ballet, Modern and Jazz Alignment and Technique
3. Locomotor Movement
4. Skeletal-muscular Structures and Function
5. Musicality
6. History
7. Jazz Dance Artists

Execute aerobic work, isolations, and other body conditioning warm ups.

Execute Ballet, Modern and Jazz body positions and alignment exercises fundamental to Jazz Dance technique.

Examine body alignment and placement in Ballet for application to the Jazz Dance movement vocabulary.

Execute locomotor movement and turns across the floor with correct technique.

Label and apply skeletal muscular anatomy, function and conditioning as it applies to dance.

Execute accurate musicality with all basic movement vocabulary, combinations and phrases.

Explain the evolution of jazz dance from the 19th century.

Identify and explain the relevance of Jazz dance choreographers and dancers from the 1910's to the present day.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement

1. Movement exam: Execute isolations, aerobic, endurance, strength and flexibility conditioning as it applies to Jazz Dance.
2. Movement and written exams: Identify and execute with correct technique all given Ballet, Modern and Jazz movement vocabulary and positions.
3. Movement exam: Execute all locomotor movement with correct technique.
4. Written and movement exam: Label skeletal muscular structures, kinesiological terms, explain their functions as it applies to dance and execute exercises to strengthen and stretch specific muscles and muscle groups.
5. Movement exam: Execute accurate musicality with given movement.
6. Written exam: Explain the evolution of jazz dance history pre-dating the formal genre from the late 1800's to the present.
7. Class assignment: Oral, written and video presentation of a Jazz choreographer or dancer.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for DNCA 161

DNCA162 - Intermediate Jazz Dance

Overview

Subject
Fine and Performing Arts

Academic Department
Fine & Performing Arts

School
Liberal Arts

Course Description
Further explores the characteristic movements of jazz dance via the use of more intricate footwork, movement phases, and combinations than those performed in basic jazz dance.

Course Pre-requisite(s)
Eligible to take ENG courses at HFC. DNCA161 Beginning Jazz Dance-Beginning Jazz Dance or Instructor Permission

Credit Hours
2

Total Contact Hours

Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
10

Academic Level
Undergraduate

Goals, Topics, and Objectives

Course Goals
To be able to correctly identify and execute Jazz movement beyond the basics with correct technique and skill.

Core Course Topics

1. Movement Vocabulary
2. Combinations, Phrases, Turns and Locomotor Movement
3. Skeletal-muscular Structures and Functions
4. Body Conditioning
5. Musicality
6. Jazz Dance Artists

Identify intermediate Jazz movement vocabulary, including French Ballet terms and state their purpose.

Execute with correct technique all given combinations, phrases, turns and locomotor movement across the dance space.

Label and apply skeletal-muscular anatomy and function as it applies to dance.

Self-evaluate fitness and body condition as it applies to dance skill.

Execute accurate musicality with all basic movement vocabulary, combinations and phrases.

Discuss choreographers and dancers who have made significant contributions to Jazz Dance.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement

1. Written and movement exams: Identify intermediate Jazz movement vocabulary and purpose from a demonstration and execute selected correct movement from their terms.
2. Movement exam: Execute all given combinations, phrases, turns and locomotor movement with correct technique.
3. Written exam: Label skeletal-muscular structures. Movement and oral exam: Illustrate and explain anatomical function as it applies to alignment and technique.
4. Class assignment: Do pre-testing for muscular endurance, strength, balance and flexibility. Analyze fitness level, according to a given criterion, and create goals and a plan for improvement. Conduct post-testing and self-evaluate.
5. Movement exam: Execute all selected movement with accurate rhythm and timing.
6. Class assignment: Oral, written and video presentation of a selected Jazz Dance choreographer or dancer.

Texts
Jump into Jazz, 5th ed., Kraines & Pryor

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for DNCA 162

DNCA163 - Advanced Jazz Dance

Overview

Subject
Fine and Performing Arts

Academic Department
Fine & Performing Arts

School
Liberal Arts

Course Description
Emphasizes advanced rhythmic complexity and movement combinations, in depth practice of specific styles of Jazz dance, and proper body conditioning for the dancer. Also offers an overview of careers in dance and an introduction to choreography.

Course Pre-requisite(s)
Eligible to take ENG courses at HFC. DNCA162 Intermediate Jazz Danceor Instructor Permission

Credit Hours
2

Total Contact Hours

Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
10

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
Determined by department

Goals, Topics, and Objectives

Course Goals
To be able to execute advanced Jazz movement phrases along with stylized techniques.

Core Course Topics

1. Advanced Movement Vocabulary
2. Jazz Styles
3. Turns and Locomotor Movement
4. Anatomy
5. Body Conditioning
6. Dance Careers
7. Musicality

Identify advanced Jazz movement vocabulary from a demonstration.

Execute all given combinations and phrases in various Jazz dance styles.

Execute turns and locomotor movement with correct technique.

Identify skeletal-muscular structures and explain their function as they apply to dance.

Self-evaluate fitness and body condition as it applies to dance skill.

List and explain dance career options.

Execute accurate musicality with all given movement.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement

1. Written exam: Identify advanced Jazz movement vocabulary from a demonstration.
2. Movement exam: Execute all given combinations and phrases with correct technique.
3. Movement exam: Execute all given turns and locomotor movement with correct technique.
4. Written and oral exam: Label skeletal-muscular anatomy and explain their functions as they apply to dance.
5. Class assignment: Pre-fitness test for muscle endurance, strength, flexibility and balance. Analyze fitness level according to a given criterion. Create goals and a plan for improvement. Post test and self-assess improvement.
6. Class assignment: List and explain dance career options.
7. Movement exam: Execute all given movement with accurate musicality.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for DNCA 163

DNCA171 - Beginning Hip Hop Dance

Overview

Subject
Fine and Performing Arts

Academic Department
Fine & Performing Arts

School
Liberal Arts

Course Description
Exploration of Hip Hop Dance as an art form that offers a limitless way to express oneself in human movement. Primary emphasis is on developing skills and techniques of the basic Hip Hop movement vocabulary supplemented by instruction in Hip Hop dance history, terminology and the principles of time, space, and energy. Classroom physical practice will focus on anatomically correct body alignment, awareness of the body in space, musicality, strength, stamina, and flexibility. Care of the body and conditioning for dance is also emphasized.Students will be evaluated during the first week of class to determine if they should place into DNCA-1721 rather than DNCA-171 as this is an introductory class intended for those with no formal Hip Hop dance experience.

Course Pre-requisite(s)
Eligible to take ENG courses at HFC.

Credit Hours
2

Total Contact Hours

Total Instructor Contact Hours:
3

Total Student Contact Hours:
3

Academic Level
Undergraduate

Goals, Topics, and Objectives

Course Goals
1. Understand and practice the skills and combinations of hip hop dance movement at a beginning level.
2. Demonstrate and practice proper conditioning of the dancers' body in preparation of dancing.
3. Provide students with a knowledge and understanding of hip hop dance history, vocabulary, events, and performance.
4. Prepare students for audition and entrance into four-year dance programs.
5. Provide transferable technique course credit were applicable (some Dance programs will take a beginning level class, where others that require auditions to enter may not).

Core Course Topics

1. Anatomical Alignment
2. Dancer Conditioning
3. Hip Hop Dance Technique
4. Musicality / Rhythmic Sensitivity
5. Hip Hop Dance Vocabulary
6. Hip Hop Dance History / Current Events / Performance

Explain musculoskeletal structure and its relationship to movement and energy in the body. Execute movement with connectivity and coordination of the parts to the whole.

Demonstrate personal growth along with an increase in individual capacity of physical strength, endurance, balance, and flexibility as needed in a beginning level dance technique class.

Demonstrate personal progression of the integration of alignment, conditioning, musicality, and use of energy to execute Hip Hop movement combinations and phrases.

Sustain accurate rhythm, dynamics, accents, and musicality with movement vocabulary, combinations, and phrases and being able to do so while adjusting to a variety of music.

Recognize, identify and apply Hip Hop Dance terminology.

Analyze historical and current events and performance in Hip Hop Dance through interpretative reading, writing, observation, and/or discussion.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of academic achievement may include but not be limited to written, oral, or movement exams to identify hip hop dance and skeletal and muscular terminology. Movement exams include the demonstration of beginning skill levels in technique, performance, and musicality. Interpretative reading and writing assignments and interactive discussion may also be used to assess academic achievement.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for DNCA 171

DNCA221 - College Dance Company I

Overview

Subject
Fine and Performing Arts

Academic Department
Fine & Performing Arts

School
Liberal Arts

Course Description
This is the first of four semesters of College Dance Company, providing opportunities to perform in a wide variety of genres and venues with different choreographers. Dance forms performed include, but are not limited to, classical, modern, jazz, tap, ballroom and Latin. In addition, HFCC Full Circle Dance Company students have an opportunity to attend dance festivals, master classes, professional dance company concerts, and to have their choreography presented. Two or more performances of a final concert are scheduled on campus as well as other performances, both on and off campus. This course is open to college students and high school juniors and seniors by audition and interview. New dance students may audition in one of several scheduled group auditions or may schedule an individual audition with the director. A strong dance background is required.

Course Pre-requisite(s)
Admission by audition each term

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
10

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
Determined by department.

Goals, Topics, and Objectives

Course Goals
To successfully complete a schedule of performances with a variety of choreographers, dance styles and venues.

Core Course Topics

1. Choreography
2. Choreographic Interpretation/Performance Presence
3. Choreographic Contribution
4. Student choreography
5. Production
6. Team Spirit
7. Class Preparedness
8. Performances
9. Log

Illustrate quick and accurate reading of all given, composed movement material.

Execute movement, illustrating clear intent of various choreographers and adapting to their individual approach and style of movement.

Illustrate performance and stage presence through maintaining character, creating nuances, and focus in all movement material and dances.

Compose motifs, phrases or sections individually from a given task.

Read, execute and successfully perform student choreography.

Set efficiently and effectively choreography on other students. (Optional composition and inclusion through student choreography auditions.)

Prepare and perform given tasks for all aspects of production.

Demonstrate contributing and volunteering to help classmates with movement material.

Illustrate working/rehearsing together without instructor guidance, when necessary.

Illustrate all previously given movement material with correct technique and performance readiness.

Illustrate modeling self disciplined behavior through attendance of all classes, pre-scheduled rehearsals and performances with punctuality, full preparedness and performance skill and presence.

Evaluate student, faculty and guest choreography.

Self critique performances of all dances.

Evaluate peer performances.

Analyze choreographer's intent for character interpretation.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement

1. Class work: Illustrate quick and accurate reading of all given, composed movement material.
2. Assignment: Log notes from choreographers, other rehearsing students, director's comments. Graded performance: Execute performance with choreographer's intent along with nuanced, focused character, wherever appropriate.
3. Assignment and class work: Prepare and illustrate composed movement material, given a task or problem to solve.
4. Class work: Perform learned student choreography and/or illustrate efficient and effective teaching of composed student pieces.
5. Assignments: Prepare and perform all given tasks in and outside of class for all aspects of production.
6. Class work: Illustrate helping classmates where needed and working in rehearsal without guidance.
7. Class work: Illustrate all previously given movement material with technique and performance readiness.
8. Performance and class work Illustrate performance preparedness through hard work, consistent attendance and punctuality, and self reliance.
9. Record all evaluation and criticism in ongoing log, throughout the course.

Texts
None

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for DNCA 221

DNCA222 - College Dance Company II

Overview

Subject
Fine and Performing Arts

Academic Department
Fine & Performing Arts

School
Liberal Arts

Course Description
This is the second of four semesters of College Dance Company, providing opportunities to perform in a wide variety of genres and venues with different choreographers. Dance forms performed include, but are not limited to, classical, modern, jazz, tap, ballroom and Latin. In addition, HFCC Full Circle Dance Company students have an opportunity to attend dance festivals, master classes, professional dance company concerts, and to have their choreography presented. Two or more performances of a final concert are scheduled on campus as well as other performances, both on and off campus. This course is open to college students and high school juniors and seniors by audition and interview. New dance students may audition in one of several scheduled group auditions or may schedule an individual audition with the director. A strong dance background is required.

Course Pre-requisite(s)
Admission by audition each term

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
10

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
Other

Goals, Topics, and Objectives

Course Goals
To successfully complete a dance production resulting from working with a variety of choreographers, dance styles and venues.

Core Course Topics

1. Audition student compositions for appropriate performances.
2. Cast students in dances.
3. Choreograph new dances and/or rework repertory pieces and meet with guest artists and students about dance choices for each given concert.
4. Teach and rehearse all dances on individual casts.
5. Schedule technical director, lighting designer and operator, sound designer and operator, and photo sessions.
6. Compile information for press, photos and all publicity.

Participate and contribute to choreography, memory of dances, and refinement in rehearsal.

Adapt to a variety of dance venues and settings.

Perform in a variety of dance genres.

Contribute a choreographic work.

Work with peers, theater technical staff, and others to be part of a collaborative vision.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement

1. Class work: Illustrate quick and accurate reading of all given, composed movement material.
2. Assignment: Log notes from choreographers, other rehearsing students, director's comments. Graded performance: Execute performance with choreographer's intent along with nuanced, focused character, wherever appropriate.
3. Assignment and class work: Prepare and illustrate composed movement material, given a task or problem to solve.
4. Class work: Perform learned student choreography and/or illustrate efficient and effective teaching of composed student pieces.
5. Assignments: Prepare and perform all given tasks in and outside of class for all aspects of production.
6. Class work: Illustrate helping classmates where needed and working in rehearsal without guidance.
7. Class work: Illustrate all previously given movement material with technique and performance readiness.
8. Performance and class work: Illustrate performance preparedness through hard work, consistent attendance and punctuality, and self-reliance.
9. Record all evaluation and criticism in ongoing log, throughout the course.

Texts
None

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for DNCA 222

DNCA223 - College Dance Company III

Overview

Subject
Fine and Performing Arts

Academic Department
Fine & Performing Arts

School
Liberal Arts

Course Description
This is the third of four semesters of College Dance Company, providing opportunities to perform in a wide variety of genres and venues with different choreographers. Dance forms performed include, but are not limited to, classical, modern, jazz, tap, ballroom and Latin. In addition, HFCC Full Circle Dance Company students have an opportunity to attend dance festivals, master classes, professional dance company concerts, and to have their choreography presented. Two or more performances of a final concert are scheduled on campus as well as other performances, both on and off campus. This course is open to college students and high school juniors and seniors by audition and interview. New dance students may audition in one of several scheduled group auditions or may schedule an individual audition with the director. A strong dance background is required

Course Pre-requisite(s)
Admission by audition each term

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
10

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
Other

Goals, Topics, and Objectives

Course Goals
To successfully complete a dance production resulting from working with a variety of choreographers, dance styles and venues.

Core Course Topics

1. Audition student compositions for appropriate performances.
2. Cast students in dances.
3. Choreograph new dances and/or rework repertory pieces and meet with guest artists and students about dance choices for each given concert.
4. Teach and rehearse all dances on individual casts.
5. Schedule technical director, lighting designer and operator, sound designer and operator, and photo sessions.
6. Compile information for press, photos and all publicity.

Participate and contribute to choreography, memory of dances, and refinement in rehearsal.

Adapt to a variety of dance venues and settings.

Perform in a variety of dance genres.

Contribute a choreographic work.

Work with peers, theater technical staff, and others to be part of a collaborative vision.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement

1. Assignment: Log notes from choreographers, other rehearsing students, director's comments. Graded performance: Execute performance with choreographer's intent along with nuanced, focused character, wherever appropriate.
2. Assignment and class work: Prepare and illustrate composed movement material, given a task or problem to solve.
3. Class work: Perform learned student choreography and/or illustrate efficient and effective teaching of composed student pieces.
4. Assignments: Prepare and perform all given tasks in and outside of class for all aspects of production.
5. Class work: Illustrate helping classmates where needed and working in rehearsal without guidance.
6. Class work: Illustrate all previously given movement material with technique and performance readiness.
7. Performance and class work: Illustrate performance preparedness through hard work, consistent attendance and punctuality, and self-reliance.
8. Record all evaluation and criticism in ongoing log, throughout the course.

Texts
None

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for DNCA 223

DNCA224 - College Dance Company IV

Overview

Subject
Fine and Performing Arts

Academic Department
Fine & Performing Arts

School
Liberal Arts

Course Description
This is the fourth of four semesters of College Dance Company, providing opportunities to perform in a wide variety of genres and venues with different choreographers. Dance forms performed include, but are not limited to, classical, modern, jazz, tap, ballroom and Latin. In addition, HFCC Full Circle Dance Company students have an opportunity to attend dance festivals, master classes, professional dance company concerts, and to have their choreography presented. Two or more performances of a final concert are scheduled on campus as well as other performances, both on and off campus. This course is open to college students and high school juniors and seniors by audition and interview. New dance students may audition in one of several scheduled group auditions or may schedule an individual audition with the director. A strong dance background is required.

Course Pre-requisite(s)
Admission by audition each term

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
10

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
Other

Goals, Topics, and Objectives

Course Goals
To successfully complete a dance production resulting from working with a variety of choreographers, dance styles and venues., basic_html

Core Course Topics

1. Audition student compositions for appropriate performances.
2. Cast students in dances.
3. Choreograph new dances and/or rework repertory pieces and meet with guest artists and students about dance choices for each given concert.
4. Teach and rehearse all dances on individual casts.
5. Schedule technical director, lighting designer and operator, sound designer and operator, and photo sessions.
6. Compile information for press, photos and all publicity.

Class work: Illustrate quick and accurate reading of all given, composed movement material.

Assignment: Log notes from choreographers, other rehearsing students, director's comments. Graded performance: Execute performance with choreographer's intent along with nuanced, focused character, wherever appropriate.

Assignment and class work: Prepare and illustrate composed movement material, given a task or problem to solve.

Class work: Perform learned student choreography and/or illustrate efficient and effective teaching of composed student pieces.

Assignments: Prepare and perform all given tasks in and outside of class for all aspects of production.

Class work: Illustrate helping classmates where needed and working in rehearsal without guidance.

Class work: Illustrate all previously given movement material with technique and performance readiness.

Performance and class work: Illustrate performance preparedness through hard work, consistent attendance and punctuality, and self reliance.

Record all evaluation and criticism in ongoing log, throughout the course

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement

1. Class work: Illustrate quick and accurate reading of all given, composed movement material.
2. Assignment: Log notes from choreographers, other rehearsing students, director's comments. Graded performance: Execute performance with choreographer's intent along with nuanced, focused character, wherever appropriate.
3. Assignment and class work: Prepare and illustrate composed movement material, given a task or problem to solve.
4. Class work: Perform learned student choreography and/or illustrate efficient and effective teaching of composed student pieces.
5. Assignments: Prepare and perform all given tasks in and outside of class for all aspects of production.
6. Class work: Illustrate helping classmates where needed and working in rehearsal without guidance.
7. Class work: Illustrate all previously given movement material with technique and performance readiness.
8. Performance and class work: Illustrate performance preparedness through hard work, consistent attendance and punctuality, and self reliance.
9. Record all evaluation and criticism in ongoing log, throughout the course.

Texts
None

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for DNCA 224

DNCA230 - Beginning Choreography

Overview

Subject
Fine and Performing Arts

Academic Department
Fine & Performing Arts

School
Liberal Arts

Course Description
This course provides opportunities to use individual creativity through the composition of dance movement. Discover and practice manipulating movement using the dance elements of time, space, and energy to create and build a dance. Movement will mainly be composed for solo pieces.

Course Pre-requisite(s)
Eligible to take ENG courses at HFC.

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
10

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
Determined by department.

Goals, Topics, and Objectives

Course Goals
To help students learn and apply the tools of the craft of choreography and to develop an appreciation for dance composition as an art form.

Core Course Topics

1. Compositional Themes
2. Alignment & Technique
3. Elements of Dance
4. Improvisation
5. Abstraction
6. Genres of Dance
7. Choreographic Devices
8. Phrases
9. Dynamics-Breathing, Accents and Climaxes
10. Compositional Structures
11. Choreographers and Choreographic Works

Explain how to select dance themes.

Select a dance theme for a project.

Execute alignment exercises and all composed movement with clear technique.

List and expound on the elements of dance and illustrate their use in developing movement material.

Illustrate improvisation that is guided or open-ended.

Explain, formulate, and illustrate abstracting the essence of movement.

List and describe current genres of dance.

List and explain the choreographic devices. Employ and demonstrate their use through the composition of motifs, phrases, sections and a dance.

Compose movement phrases and thematic movement phrases using improvisation, abstract ideas and the choreographic devices.

Examine a phrase and determine the high point and accents.

Create phrases employing a high point and accents.

Experiment with breathing in a selected phrase, determine ways in which it flows logically as well as its effect on the phrase's dynamics.

List and explain compositional forms and structure motifs into phrases, phrases into sections, and sections into a dance.

Choose a famous choreographic work and explain the choroegrapher's approach to their work, its inspiration and significance.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement

1. Class assignment: List places from which dance themes can be drawn. Expound on personal inspirations/motivations for dances.
2. Movement assignments: Execute alignment exercises and illustrate clear technique through all dance studies/classroom projects.
3. Written exam: List and explain the elements of dance and their uses.
4. Classroom work: Illustrate improvisation from a given problem to solve or an open-ended idea.
5. Movement and oral exam: Explain and illustrate abstracting the essence of a movement from a literal to an abstract gesture.
6. Written exam: List, define and describe the current dance genres.
7. Written exam: List and describe the choreographic devices as discussed in class. Classroom assignments: Dance Studies-Employ the use of the devices through the creation of the dance study. Final exam: Illustrate use of the devices in the final dance project.
8. Classroom assignments: Compose movement phrases for assigned dance studies with given parameters.
9. Classroom work: Employ climaxes, breathing and accents in given and/or self-composed phrases.
10. Written exam: List and explain compositional structures. Movement exam: Illustrate the selection and use of a compositional structure in the final project.
11. Classroom assignment: Oral, written, video and/or Power Point presentation of a selected choreographer and their works, explaining their significance and contribution to dance as an art form.

Texts
The Intimate Act of Choreography, Blom & Chaplin

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for DNCA 230

DNCA253 - Advanced Modern Dance

Overview

Subject
Fine and Performing Arts

Academic Department
Fine & Performing Arts

School
Liberal Arts

Course Description
Explores advanced modern dance. Primary emphasis is on performing advanced movement phrases and on developing choreographic skill and stage presence.

Course Pre-requisite(s)
Eligible to take ENG courses at HFC. DNCA152 Intermediate Modern Dance or Instructor Permission

Credit Hours
2

Total Contact Hours

Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
10

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
Determined by department.

Goals, Topics, and Objectives

Course Goals
To be able to correctly identify and execute advanced Modern Dance movement vocabulary with correct technique and skill; develop choreographic skill; and improve stage presence and performance , basic_html

Core Course Topics

1. Movement vocabulary, oral recitation, and skill
2. Eclectic Modern Dance
3. Musical genres and rhythms
4. Techniques of Modern Dance pioneers
5. Improvisation and choreography

Identify a comprehensive Modern dance movement vocabulary from a demonstration.

Execute advanced Modern dance movement phrases in various styles with skill.

Execute movement with rhythmical accuracy and connection with the music.

Demonstrate the ability to transcend technique and translate a choreographer's intent into performance.

Identify and state the approaches to movement of both Modern dance pioneers and current choreographers.

Demonstrate the fundamentals of choreography and improvise given a starting point.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement

1. Written exam: identify movement vocabulary from a demonstration.
2. Movement exam: through performance, demonstrate phrases in various styles.
3. Movement exam: demonstrate ability to connect with music, rhythmically and stylistically.
4. Movement self-evaluation with instructor peer panel: demonstrate ability to translate particular styles and movement.
5. Oral written assignment: research paper, oral presentation with video clips of given Modern dance pioneers and current contributors.
6. Assignments: dance studies given to use choreographic tools of the craft.

Texts
A Creative Habit, Twyla Tharp

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for DNCA 253

DNCA1421 - Intermediate Ballet I

Overview

Subject
Fine and Performing Arts

Academic Department
Fine & Performing Arts

School
Liberal Arts

Course Description
Provides students with continued applied study of ballet technique based on skill level, supplemented by instruction in ballet history, current choreographers and companies, terminology and classical dance principles. The course provides students with the opportunity to explore multiple aspects of this traditional and foundational dance art. Learning activities include physical practice, observation, discussion, reading and writing to cultivate kinesthetic, aesthetic, and intellectual understanding of ballet.Classroom physical practice will focus on anatomically correct body alignment, placement, and turn-out, musicality, strength, stamina, and flexibility. Care of the body and conditioning for dance is also emphasized.The ballet work for Intermediate Ballet I is suitable for students starting to work on their intermediate ballet knowledge and skill set. Intermediate Ballet II and III provides an opportunity for students to continue the development of their ballet movement and expression skills. Student's will continue their academic growth through immersion in history, choreography, terminology and dance principles.

Course Pre-requisite(s)
Eligible to take ENG courses at HFC.

Credit Hours
2

Total Contact Hours

Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
10

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Goals, Topics, and Objectives

Course Goals
1. Develop more complex skills and combinations of ballet movement beyond the beginning level and to condition their body in preparation for more advanced level work.
2. Provide students with a knowledge-based immersion in Ballet history, vocabulary, events, and performance.
3. Prepare students for audition and entrance into four year dance programs.
4. Provide transferable technique course credit.

Core Course Topics

- Anatomical Alignment
- Dancer Conditioning
- Ballet Technique
- Musicality / Rhythmic Sensitivity
- Ballet Vocabulary
- Ballet History / Current Events / Performance

Explain musculoskeletal structure and its relationship to movement and energy in the body. Execute movement with connectivity and coordination of the parts to the whole.

Show personal progression and demonstrate Increased individual capacity for physical strength, endurance, balance, and flexibility.

Show personal progression of the integration of alignment, conditioning, musicality, and use of energy to execute intermediate Ballet movement combinations and phrases at the barre and centre.

Sustain accurate rhythm, dynamics, accents, and musicality with movement vocabulary, combinations, and phrases. Adjust to a variety of music.

Identify and apply Ballet terminology and English translation.

Analyze historical and current events and performance in Ballet through interpretative reading, writing, observation, and discussion.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of academic achievement may include but not be limited to written, oral, or movement exams to identify ballet and skeletal and muscular terminology. Movement exams include the demonstration of intermediate skill levels in technique, performance, and musicality. Interpretative reading and writing assignments and interactive discussion will be used to assess academic achievement.

Texts
To be determined by instructor each semester.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for DNCA 1421

DNCA1422 - Intermediate Ballet II

Overview

Subject
Fine and Performing Arts

Academic Department
Fine & Performing Arts

School
Liberal Arts

Course Description
This is the second of three skill-based two-credit courses where students continue the applied study of ballet technique based on skill level, supplemented by instruction in ballet history, current choreographers and companies, terminology and classical dance principles. The course provides students with the opportunity to explore multiple aspects of this traditional and foundational dance art. Learning activities include physical practice, observation, discussion, reading and writing to cultivate kinesthetic, aesthetic, and intellectual understanding of ballet.Classroom physical practice will focus on anatomically correct body alignment, placement, and turn-out, musicality, strength, stamina, and flexibility. Care of the body and conditioning for dance is also emphasized.

Course Pre-requisite(s)
DNCA1421 Intermediate Ballet I Intermediate Ballet I

Credit Hours
2

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
10

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Goals, Topics, and Objectives

Course Goals
1. Develop more complex skills and combinations of ballet movement beyond the beginning level and to condition their body in preparation for more advanced level work.
2. Provide students with a knowledge-based immersion in Ballet history, vocabulary, events, and performance.
3. Prepare students for audition and entrance into four year dance programs.
4. Provide transferable technique course credit.

Core Course Topics
- Anatomical Alignment
- Dancer Conditioning
- Ballet Technique
- Musicality / Rhythmic Sensitivity
- Ballet Vocabulary
- Ballet History / Current Events / Performance

Explain musculoskeletal structure and its relationship to movement and energy in the body. Execute movement with connectivity and coordination of the parts to the whole.
Show personal progression and demonstrate increased individual capacity for physical strength, endurance, balance, and flexibility.
Show personal progression of the integration of alignment, conditioning, musicality, and use of energy to execute intermediate Ballet movement combinations and phrases at the barre and centre.
Sustain accurate rhythm, dynamics, accents, and musicality with movement vocabulary, combinations, and phrases. Adjust to a variety of music.
Identify and apply Ballet terminology and English translation.
Analyze historical and current events and performance in Ballet through interpretative reading, writing, observation, and discussion.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of academic achievement may include but not be limited to written, oral, or movement exams to identify ballet and skeletal and muscular terminology. Movement exams include the demonstration of intermediate skill levels in technique, performance, and musicality. Interpretative reading and writing assignments and interactive discussion will be used to assess academic achievement.

Texts
To be determined by instructor each semester.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for DNCA 1422

DNCA1423 - Intermediate Ballet III

Overview

Subject
Fine and Performing Arts

Academic Department
Fine & Performing Arts

School
Liberal Arts

Course Description
This is the third of three skill-based two-credit courses where students continue the applied study of ballet technique based on skill level, supplemented by instruction in ballet history, current choreographers and companies, terminology and classical dance principles. The course provides students with the opportunity to explore multiple aspects of this traditional and foundational dance art. Learning activities include physical practice, observation, discussion, reading and writing to cultivate kinesthetic, aesthetic, and intellectual understanding of ballet.Classroom physical practice will focus on anatomically correct body alignment, placement, and turn-out, musicality, strength, stamina, and flexibility. Care of the body and conditioning for dance is also emphasized.

Course Pre-requisite(s)
DNCA1422 Intermediate Ballet II Intermediate Ballet II

Credit Hours
2

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
10

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Goals, Topics, and Objectives

Course Goals
1. Develop more complex skills and combinations of ballet movement beyond the beginning level and to condition their body in preparation for more advanced level work.
2. Provide students with a knowledge-based immersion in Ballet history, vocabulary, events, and performance.
3. Prepare students for audition and entrance into four year dance programs.
4. Provide transferable technique course credit.

Core Course Topics
- Anatomical Alignment
- Dancer Conditioning
- Ballet Technique
- Musicality / Rhythmic Sensitivity
- Ballet Vocabulary
- Ballet History / Current Events / Performance

Explain musculoskeletal structure and its relationship to movement and energy in the body. Execute movement with connectivity and coordination of the parts to the whole.
Show personal progression and demonstrate increased individual capacity for physical strength, endurance, balance, and flexibility.
Show personal progression of the integration of alignment, conditioning, musicality, and use of energy to execute intermediate Ballet movement combinations and phrases at the barre and centre.
Sustain accurate rhythm, dynamics, accents, and musicality with movement vocabulary, combinations, and phrases. Adjust to a variety of music.
Identify and apply Ballet terminology and English translation.
Analyze historical and current events and performance in Ballet through interpretative reading, writing, observation, and discussion.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of academic achievement may include but not be limited to written, oral, or movement exams to identify ballet and skeletal and muscular terminology. Movement exams include the demonstration of intermediate skill levels in technique, performance, and musicality. Interpretative reading and writing assignments and interactive discussion will be used to assess academic achievement.

Texts
To be determined by instructor each semester.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for DNCA 1423

DNCA1521 - Intermediate Modern Dance I

Overview

Subject
Fine and Performing Arts

Academic Department
Fine & Performing Arts

School
Liberal Arts

Course Description
Provides students with continued applied study of modern dance technique based on skill level, supplemented by instruction in modern dance history, current choreographers and companies, terminology and the principles of time, space, and energy. The course provides students the opportunity to explore multiple aspects of modern dance. Learning activities physical practice, observation, discussion, reading and writing to cultivate a kinesthetic, aesthetic, and intellectual understanding of modern dance.Classroom physical practice will focus on anatomically correct body alignment, awareness of the body in space, musicality, strength, stamina, and flexibility. Care of the body and conditioning for dance is also emphasized.The modern dance work for Intermediate Modern Dance I is suitable for students starting to work on their intermediate modern dance knowledge and skill set. Intermediate Modern Dance II and III provides an opportunity for students to continue the development of their modern dance movement and expression skills. Student's will continue their academic growth through immersion in history, choreography, terminology and dance principles.

Course Pre-requisite(s)
Eligible to take ENG courses at HFC.

Credit Hours
2

Total Contact Hours

Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
10

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Goals, Topics, and Objectives

Course Goals
1. Develop more complex skills and combinations of ballet movement beyond the beginning level and to condition their body in preparation for more advanced level work.
2. Provide students with a knowledge-based immersion in Modern Dance history, vocabulary, events, and performance.
3. Prepare students for audition and entrance into four year dance programs.
4. Provide transferable technique course credit.

Core Course Topics
- Anatomical Alignment
- Dancer Conditioning
- Modern Dance Technique
- Musicality / Rhythmic Sensitivity
- Modern Dance Vocabulary
- Improvisation and Choreography
- Modern Dance History / Current Events / Performance

Explain musculoskeletal structure and its relationship to movement and energy in the body. Execute movement with connectivity and coordination of the parts to the whole.

Show personal progression and demonstrate increased individual capacity of physical strength, endurance, balance, and flexibility.

Show personal progression of the integration of alignment, conditioning, musicality, and use of energy to execute intermediate Modern movement combinations and phrases.

Sustain accurate rhythm, dynamics, accents, and musicality with movement vocabulary, combinations, and phrases. Adjust to a variety of music.

Identify and apply Modern Dance terminology.

Show the relationship of improvised movement to composition of movement phrases and choreography. Compose movement phrases through improvisation and movement manipulation as a soloist, with a partner or in a small group.

Analyze historical and current events and performance in Modern Dance through interpretative reading, writing, observation, and discussion.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of academic achievement may include but not be limited to written, oral, or movement exams to identify modern dance and skeletal and muscular terminology. Movement exams include the demonstration of intermediate skill levels in technique, performance, and musicality. Interpretative reading and writing assignments and interactive discussion will be used to assess academic achievement.

Texts
The Dancer Prepares-Modern Dance for Beginners, 5th ed., Penrod and Plastino

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for DNCA 1521

DNCA1522 - Intermediate Modern Dance II

Overview

Subject
Fine and Performing Arts

Academic Department
Fine & Performing Arts

School
Liberal Arts

Course Description
This is the second of three skill-based two-credit courses where students continue the applied study of modern dance technique based on skill level, supplemented by instruction in modern dance history, current choreographers and companies, terminology and the principles of time, space, and energy. The course provides students with the opportunity to explore multiple aspects of modern dance. Learning activities include physical practice, observation, discussion, reading and writing to cultivate kinesthetic, aesthetic, and intellectual understanding of modern dance.Classroom physical practice will focus on anatomically correct body alignment, awareness of the body in space, musicality, strength, stamina, and flexibility. Care of the body and conditioning for dance is also emphasized.

Course Pre-requisite(s)
DNCA1521 Intermediate Modern Dance I Intermediate Modern Dance I

Credit Hours
2

Total Contact Hours

Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
10

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Goals, Topics, and Objectives

Course Goals
1. Develop more complex skills and combinations of ballet movement beyond the beginning level and to condition their body in preparation for more advanced level work.
2. Provide students with a knowledge-based immersion in Modern Dance history, vocabulary, events, and performance.
3. Prepare students for audition and entrance into four year dance programs.
4. Provide transferable technique course credit.

Core Course Topics
- Anatomical Alignment
- Dancer Conditioning
- Modern Dance Technique
- Musicality / Rhythmic Sensitivity
- Modern Dance Vocabulary
- Improvisation and Choreography
- Modern Dance History / Current Events / Performance

Explain musculoskeletal structure and its relationship to movement and energy in the body. Execute movement with connectivity and coordination of the parts to the whole.

Show personal progression and demonstrate increased individual capacity of physical strength, endurance, balance, and flexibility.

Show personal progression of the integration of alignment, conditioning, musicality, and use of energy to execute intermediate Modern movement combinations and phrases.

Sustain accurate rhythm, dynamics, accents, and musicality with movement vocabulary, combinations, and phrases. Adjust to a variety of music.

Identify and apply Modern Dance terminology.

Show the relationship of improvised movement to composition of movement phrases and choreography. Compose movement phrases through improvisation and movement manipulation as a soloist, with a partner or in a small group.

Analyze historical and current events and performance in Modern Dance through interpretative reading, writing, observation, and discussion.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of academic achievement may include but not be limited to written, oral, or movement exams to identify modern dance and skeletal and muscular terminology. Movement exams include the demonstration of intermediate skill levels in technique, performance, and musicality. Interpretative reading and writing assignments and interactive discussion will be used to assess academic achievement.

Texts
To be determined by instructor each semester

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for DNCA 1522

DNCA1523 - Intermediate Modern Dance III

Overview

Subject
Fine and Performing Arts

Academic Department
Fine & Performing Arts

School
Liberal Arts

Course Description
This is the third of three skill-based two-credit courses where students continue the applied study of modern dance technique based on skill level, supplemented by instruction in modern dance history, current choreographers and companies, terminology and the principles of time, space, and energy. The course provides students with the opportunity to explore multiple aspects of modern dance. Learning activities include physical practice, observation, discussion, reading and writing to cultivate kinesthetic, aesthetic, and intellectual understanding of modern dance.Classroom physical practice will focus on anatomically correct body alignment, awareness of the body in space, musicality, strength, stamina, and flexibility. Care of the body and conditioning for dance is also emphasized.

Course Pre-requisite(s)
DNCA1522 Intermediate Modern Dance II Intermediate Modern Dance II

Credit Hours
2

Total Contact Hours

Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
10

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Goals, Topics, and Objectives

Course Goals
1. Develop more complex skills and combinations of ballet movement beyond the beginning level and to condition their body in preparation for more advanced level work.
2. Provide students with a knowledge-based immersion in Modern Dance history, vocabulary, events, and performance.
3. Prepare students for audition and entrance into four year dance programs.
4. Provide transferable technique course credit.

Core Course Topics
- Anatomical Alignment
- Dancer Conditioning
- Modern Dance Technique
- Musicality / Rhythmic Sensitivity
- Modern Dance Vocabulary
- Improvisation and Choreography
- Modern Dance History / Current Events / Performance

Explain musculoskeletal structure and its relationship to movement and energy in the body. Execute movement with connectivity and coordination of the parts to the whole.

Show personal progression and demonstrate increased individual capacity of physical strength, endurance, balance, and flexibility.

Show personal progression of the integration of alignment, conditioning, musicality, and use of energy to execute intermediate Modern movement combinations and phrases.

Sustain accurate rhythm, dynamics, accents, and musicality with movement vocabulary, combinations, and phrases. Adjust to a variety of music.

Identify and apply Modern Dance terminology.

Show the relationship of improvised movement to composition of movement phrases and choreography. Compose movement phrases through improvisation and movement manipulation as a soloist, with a partner or in a small group.

Analyze historical and current events and performance in Modern Dance through interpretative reading, writing, observation, and discussion.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of academic achievement may include but not be limited to written, oral, or movement exams to identify modern dance and skeletal and muscular terminology. Movement exams include the demonstration of intermediate skill levels in technique, performance, and musicality. Interpretative reading and writing assignments and interactive discussion will be used to assess academic achievement.
Texts
To be determined by instructor each semester

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for DNCA 1523

DNCA1721 - Intermediate Hip Hop Dance

Overview

Subject
Fine and Performing Arts

Academic Department
Fine & Performing Arts

School
Liberal Arts

Course Description
Provides students with continued applied study of Hip Hop dance technique based on skill level, supplemented by instruction in Hip Hop dance history, current choreographers and companies, terminology and the principles of time, space, and energy. The course provides students the opportunity to begin to explore multiple aspects of Hip Hop dance. Learning activities include physical practice, observation, discussion, reading and writing to cultivate a kinesthetic, aesthetic, and intellectual understanding of Hip Hop dance.Classroom physical practice will focus on anatomically correct body alignment, awareness of the body in space, musicality, strength, stamina, and flexibility. Care of the body and conditioning for dance is also emphasized.The Hip Hop dance work for Intermediate Hip Hop Dance I is suitable for students starting to work on their intermediate hip hop dance knowledge and skill set. Intermediate Hip Hop Dance II and III provide an opportunity for students to continue the development of their Hip Hop dance movement and expression skills. Student's will continue their academic growth through immersion in history, choreography, terminology and dance principles.

Course Pre-requisite(s)
C or above in DNCA171 Beginning Hip Hop Dance Beginning Hip Hop Dance, or permission from instructor

Credit Hours
2

Total Contact Hours

Total Instructor Contact Hours:
3

Total Student Contact Hours:
3

Academic Level
Undergraduate

Goals, Topics, and Objectives

Course Goals
1. Develop more complex skills and combinations of Hip Hop dance movement beyond the beginning level.
2. Demonstrate and practice proper conditioning of the dancers' body in preparation of more advanced level work
3. Provide students with a knowledge-based immersion in Hip Hop Dance history, vocabulary, events, and performance.
4. Prepare students for audition and entrance into four-year dance programs.
5. Provide transferable technique course credit.

Core Course Topics
- Anatomical Alignment
- Dancer Conditioning
- Hip Hop Dance Technique
- Musicality / Rhythmic Sensitivity
- Hip Hop Dance Vocabulary
- Hip Hop Dance History / Current Events / Performance

Explain musculoskeletal structure and its relationship to movement and energy in the body. Execute movement with connectivity and coordination of the parts to the whole.

Demonstrate personal progression and increased individual capacity of physical strength, endurance, balance, and flexibility.

Show personal progression of the integration of alignment, conditioning, musicality, and use of energy to execute intermediate Hip Hop movement combinations and phrases

Sustain accurate rhythm, dynamics, accents, and musicality with movement vocabulary, combinations, and phrases and being able to do so while adjusting to a variety of music.

Identify and apply Hip Hop Dance terminology.

Analyze historical and current events and performance in Hip Hop Dance through interpretative reading, writing, observation, and/or discussion.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of academic achievement may include but not be limited to written, oral, or movement exams to identify modern dance and skeletal and muscular terminology. Movement exams include the demonstration of intermediate skill levels in technique, performance, and musicality. Interpretative reading and writing assignments and interactive discussion will be used to assess academic achievement.
Grading Scale
A - E

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for DNCA 1721

DNCA1722 - Intermediate Hip Hop Dance II

Overview

Subject
Fine and Performing Arts

Academic Department
Fine & Performing Arts

School
Liberal Arts

Course Description
This is the second of three skill-based two-credit courses where students continue the applied study of Hip Hop dance technique based on skill level, supplemented by instruction in Hip Hop dance history, current choreographers and companies, terminology and the principles of time, space, and energy. The course provides students with the opportunity to explore multiple aspects of Hip Hop dance. Learning activities include physical practice, observation, discussion, reading and/or writing to cultivate kinesthetic, aesthetic, and intellectual understanding of Hip Hop dance.Classroom physical practice will focus on anatomically correct body alignment, awareness of the body in space, musicality, strength, stamina, and flexibility. Care of the body and conditioning for dance is also emphasized.

Course Pre-requisite(s)
C or above in DNCA1721 Intermediate Hip Hop Dance Intermediate Hip Hop Dance

Credit Hours
2

Total Contact Hours
Total Instructor Contact Hours:
3

Total Student Contact Hours:
3

Academic Level
Undergraduate

Goals, Topics, and Objectives

Course Goals
1. Further develop complex skills and combinations of hip hop dance movement at the intermediate level.
2. Demonstrate and practice proper conditioning of the dancers' body in preparation of more advanced level work
3. Provide students with a greater knowledge-based immersion in Hip Hop Dance history, vocabulary, events, and performance.
4. Prepare students for audition and entrance into four-year dance programs.
5. Provide transferable technique course credit.

Core Course Topics
- Anatomical Alignment
- Dancer Conditioning
- Hip Hop Dance Technique
- Musicality / Rhythmic Sensitivity
- Hip Hop Dance Vocabulary
- Improvisation and Choreography
- Hip Hop Dance History / Current Events / Performance

Explain musculoskeletal structure and its relationship to movement and energy in the body. Execute movement with connectivity and coordination of the parts to the whole.
Demonstrate personal progression along with a continued increase in individual capacity of physical strength, endurance, balance, and flexibility.
Demonstrate personal progression of the integration of alignment, conditioning, musicality, and use of energy to execute more developed capacity of intermediate Hip Hop movement combinations and phrases.
Sustain accurate rhythm, dynamics, accents, and musicality with movement vocabulary, combinations, and phrases and being able to do so while adjusting to a variety of music.
Identify and apply Hip Hop Dance terminology.
Demonstrate the relationship of improvised movement to composition of movement phrases and choreography. Begin to compose movement phrases through improvisation and movement manipulation as a soloist, with a partner or in a small group.
Analyze historical and current events and performance in Hip Hop Dance through interpretative reading, writing, observation, and/or discussion.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of academic achievement may include but not be limited to written, oral, or movement exams to identify modern dance and skeletal and muscular terminology. Movement exams include the demonstration of intermediate skill levels in technique, performance, and musicality. Interpretative reading and writing assignments and interactive discussion will be used to assess academic achievement.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for DNCA 1722

DNCA1723 - Intermediate Hip Hop Dance III

Overview

Subject
Fine and Performing Arts

Academic Department
Fine & Performing Arts

School
Liberal Arts

Course Description
This is the third of three skill-based two-credit courses where students continue the applied study of Hip Hop dance technique based on skill level, supplemented by instruction in Hip Hop dance history, current choreographers and companies, terminology and the principles of time, space, and energy. The course provides students with the opportunity to explore multiple aspects of Hip Hop dance. Learning activities include physical practice, observation, discussion, reading and writing to cultivate kinesthetic, aesthetic, and intellectual understanding of Hip Hop dance.Classroom physical practice will focus on anatomically correct body alignment, awareness of the body in space, musicality, strength, stamina, and flexibility. Care of the body and conditioning for dance is also emphasized

Course Pre-requisite(s)
C or above in DNCA1722 Intermediate Hip Hop Dance II Intermediate Hip Hop Dance II

Credit Hours
2

Total Contact Hours
Total Instructor Contact Hours:
3

Total Student Contact Hours:
3

Academic Level
Undergraduate

Goals, Topics, and Objectives

Course Goals
1. Further develop complex skills and combinations of hip hop dance movement at an advanced intermediate level.
2. Demonstrate and practice proper conditioning of the dancers' body in preparation of more advanced level work
3. Provide students with a greater knowledge-based immersion in Hip Hop Dance history, vocabulary, events, and performance.
4. Prepare students for audition and entrance into four-year dance programs.
5. Provide transferable technique course credit.

Core Course Topics
- Anatomical Alignment
- Dancer Conditioning
- Hip Hop Dance Technique
- Musicality / Rhythmic Sensitivity
- Hip Hop Dance Vocabulary
- Improvisation and Choreography
- Hip Hop Dance History / Current Events / Performance

Explain musculoskeletal structure and its relationship to movement and energy in the body. Execute movement with connectivity and coordination of the parts to the whole.
Demonstrate personal progression along with a continued increase in individual capacity of physical strength, endurance, balance, and flexibility.
Demonstrate personal progression of the integration of alignment, conditioning, musicality, and use of energy to execute more developed capacity of intermediate Hip Hop movement combinations and phrases.
Sustain accurate rhythm, dynamics, accents, and musicality with movement vocabulary, combinations, and phrases and being able to do so while adjusting to a variety of music.
Identify and apply Hip Hop Dance terminology.
Demonstrate the relationship of improvised movement to composition of movement phrases and choreography. Begin to compose movement phrases through improvisation and movement manipulation as a soloist, with a partner or in a small group.
Analyze historical and current events and performance in Hip Hop Dance through interpretative reading, writing, observation, and/or discussion.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of academic achievement may include but not be limited to written, oral, or movement exams to identify modern dance and skeletal and muscular terminology. Movement exams include the demonstration of intermediate skill levels in technique, performance, and musicality. Interpretative reading and writing assignments and interactive discussion will be used to assess academic achievement.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for DNCA 1723

DRAF110 - Introduction to Industrial Drafting

Overview

Subject
Industrial Drafting/CAD Techn

Academic Department
Adv Manufacturing/Fabrication

School
Business, Entrepreneurshp, PD

Course Description
Introduces the use of drafting instruments, lettering technique, geometric construction, orthographic projection, pictorial drawing, basic dimensioning for manufacturing, sectioning, auxiliaries, an introduction to assembly drawings, print reading, and interpretation of drawings.

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
77

Total Student Contact Hours:
77

Course Fee
25

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Measuring with a scale
2. Identify and draw various ANSI line types
3. Free hand lettering
4. Orthographics
5. Auxiliary views
6. Section views
7. Screw Threads
8. Dimensioning
9. Assemblies

Measure a linear distance using a scale graduated in fractional inches, decimal inches and millimeters.

Accurately construct lines, circles, and arcs in specific relationship with each other with the use of a compass, triangles, and templates.

Draw and apply the various line types used on a mechanical drawing with the use of a compass, triangles, and templates.

Freehand letter dimensions and notes using conventional Gothic style.

Construct orthographic views from a given isometric drawing.

Solve for missing views in an orthographic arrange of views.

Create an auxiliary view using the reference line method.

Construct a half and full section view.

Identify and know the nomanclature of external and internal screw threads.

Apply basic dimensioning skills in dimensioning a part drawing for the purpose of manufacturing.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
All students will be required to complete a set of competencies measured through drawings, tests, written assignments, and achieving a cumulative average of 60% or above.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for DRAF 110

DRAF120 - Introduction to CAD

Overview

Subject
Industrial Drafting/CAD Techn

Academic Department
Adv Manufacturing/Fabrication

School
Business, Entrepreneurshp, PD

Course Description
Introduces Computer-Aided Drafting (CAD) techniques. Topics include: general computer operations, basic file management procedures, basic three-dimensional (3-D) solid modeling techniques, preparation of sketches for modeling, creating orthographic drawings, auxiliaries, sectioning, application of dimensions techniques, and assembly.

Course Pre-requisite(s)
DRAF110 Intro Industrial Drafting

Course Co-requisite(s)
DRAF110 Intro Industrial Drafting

Credit Hours
4

Total Contact Hours
Total Instructor Contact Hours:
92

Total Student Contact Hours:
92

Course Fee
40

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Use of computer: file system, hardware and software
2. The CAD environment
3. Organize feature management structures (tree etc.)
4. Opening CAD programs, manipulating, and saving files
5. Introduction to Part Design
6. Exploring dress-up features
7. Drawing part Design
8. Assembly modeling
9. Creating orthographic, section, and auxiliary views of a part

Demonstrate proper use of Computer Aided Drafting equipment.

Use 3D Solid Modeling software to create models.

Create orthographic drawings from 3D models.

Demonstrate proper file management procedures.

Prepare sketches for modeling.

Edit and update sketches related to 3D solid models.

Create part drawings using a variety of construction methods.

Use and control accuracy enhancement tools.

Change geometry utilizing editing commands.

Identify, create, and place appropriate orthographic, auxiliary and section views.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
All students will be required to complete a set of competencies measured through drawings, tests, written assignments, and achieving a cumulative average of 60% or above.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for DRAF 120

DRAF122 - Solidworks Level I- Introduction

Overview

Subject
Industrial Drafting/CAD Techn

Academic Department
Adv Manufacturing/Fabrication

School
Business, Entrepreneurshp, PD

Course Description
Introduces SolidWorks and its functionality including the creation of a rough sketch of geometry and how to correctly define it. Explores how to set up drawing units, modify dimensions on a sketch, and complete a 3-dimensional (3D) solid model. Also covers features of SolidWorks including orthographic views and basic file management procedures.

Course Pre-requisite(s)
DRAF120 Intro to CAD, equivalent/CAD class, CAD work experience, or Instructor Permission

Credit Hours
2

Total Contact Hours
Total Instructor Contact Hours:
32

Total Student Contact Hours:
32

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Overview of Manipulating and Navigating SolidWorks Drawing Environment
2. Mouse Functions
3. Whole Wizard
4. Feature Manager Design Tree
5. Sketch Tool
6. Solid Models
7. Orthographic Views

Identify the different areas of SolidWorks screen layout.

Demonstrate proper mouse manipulation.

Create, define, and edit a sketch.

Develop a 3D model from sketch geometry.

Conduct editing procedures to a 3D model.

Apply basic drafting techniques to 2-dimensional (2D) drawings.

Establish units for a drawing file.

Perform basic file management procedures.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
All students will be required to complete a set of competencies measured through assignments, exams, and quizzes and achieving a cumulative average of 70%.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for DRAF 122

DRAF123 - Introduction to CATIA V5

Overview

Subject
Industrial Drafting/CAD Techn

Academic Department
Adv Manufacturing/Fabrication

School
Business, Entrepreneurshp, PD

Course Description
Introduces the basics of CATIA V5 and its functionality. Utilizes the part design, sketcher, drafting, and assembly design workbenches to make models that are properly constructed and constrained. Coursework explores how CATIA's tools and toolbars are used in these workbenches.

Course Pre-requisite(s)
DRAF120 Intro to CAD or Instructor Permission

Credit Hours
2

Total Contact Hours
Total Instructor Contact Hours:
32

Total Student Contact Hours:
32

Course Fee
40

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Overview: configuring and navigating the environment
2. Sketcher Workbench
3. Part Design Workbench
4. Drafting Workbench
5. Assembly Workbench

Identify the general screen layout, standard tool, and mouse functions.

Construct a part in the sketcher workbench.

Construct a model in the part design workbench.

Bring a model into the drafting workbench and create sheets & views.

Create text & dimensions in the drafting workbench.

Construct a model using Boolean operation.

Bring parts into the assembly workbench and apply constraints.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
All students will be required to complete a set of competencies measured through drawings, tests, written assignments, and achieving a cumulative average of 60% or above.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for DRAF 123

DRAF124 - Solidworks Level II - Advanced

Overview

Subject
Industrial Drafting/CAD Techn

Academic Department
Adv Manufacturing/Fabrication

School
Business, Entrepreneurshp, PD

Course Description
Focuses on applying orthographic principles to mechanical drawings, using the SolidWorks software program. Provides instruction on how to develop section views, auxiliary views, and isometric projections; how to lay out detailed drawings, including advanced assembly procedures and manipulation of assembly components; and how to apply dimensions for manufacturing to orthographic views.

Course Pre-requisite(s)
DRAF122 Solidworks Level I- Intro

Credit Hours
2

Total Contact Hours
Total Instructor Contact Hours:
32

Total Student Contact Hours:
32

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Title Blocks
2. Borders
3. Dimensions
4. Sections Views
5. Auxiliary Views
6. Detail Drawings
7. Assembly

Apply functional dimensions to orthographic views.

Develop section views.

Produce auxiliary views.

Insert an isometric projection into a drawing.

Define a title block in a drawing, and complete the title block.

Attach a border unto a drawing file.

Establish drawing preferences.

Create detail drawings.

Employ advance assembly procedures.

Edit and manipulate components of an assembly.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
All students will be required to complete a set of competencies measured through assignments, exams, and quizzes and achieving a cumulative average of 70%.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for DRAF 124

DRAF125 - CATIA V5 Level II

Overview

Subject
Industrial Drafting/CAD Techn

Academic Department
Adv Manufacturing/Fabrication

School
Business, Entrepreneurshp, PD

Course Description
Builds on the CATIA V5 concepts introduced in DRAF 123. Expands upon some workbenches demonstrated in the previous course and others will be introduced. Topics include: advanced part design, advanced assemblies, kinematics simulations, the use of the specification tree, creating design tables, and using component catalogs.

Course Pre-requisite(s)
DRAF123 Introduction to CATIA V5

Credit Hours
2

Total Contact Hours
Total Instructor Contact Hours:
32

Total Student Contact Hours:
32

Course Fee
40

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Editing parts
2. Advanced techniques in Assembly Work Bench
3. Advanced techniques in Part Work Bench
4. Use of catalogs
5. Use of Digital Mock Up (DMU) Work Bench

Correct a problem with a design by re-ordering the Specification Tree.

Project lines and surfaces from an existing part to make a new part.

Construct a Part in the Assembly Tool Bench.

Create a Design Table.

Insert a Part into a Catalog.

Make a part in context.

Replace Components in an Assembly.

Animate an assembly simulation.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
All students will be required to complete a set of competencies measured through drawings, tests, written assignments, and achieving a cumulative average of 60% or above.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for DRAF 125

DRAF126 - Solidworks Level III - Applications

Overview

Subject
Industrial Drafting/CAD Techn

Academic Department
Adv Manufacturing/Fabrication

School
Business, Entrepreneurshp, PD

Course Description
An advanced industrial applications course utilizing 3-dimensional (3D) advanced construction tools. Focuses on how to apply key concepts from prior SolidWorks courses to real-world industrial projects. Also examines how to create, edit, and export bills of materials; apply assembly modeling procedures; create exploded views; edit components in an assembly; add and constrain mates; utilize simulation Xpress tool; and perform basic motion analysis.

Course Pre-requisite(s)
DRAF124 Solidworks Level II - Advanced

Credit Hours
2

Total Contact Hours
Total Instructor Contact Hours:
32

Total Student Contact Hours:
32

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics
1. Offset Reference Planes
2. 3D Construction Tools
3. Bill of Materials
4. Assembly Creation
5. Assembly Mates
6. Basic Motion Analysis
7. Simulation Xpress

Create offset reference planes.

Create a revolved and an extruded boss feature.

Develop lofted, swept, and shell features.

Insert components to complete an assembly drawing.

Edit components in an assembly.

Assemble components for basic motion study.

Apply concentric and coincident mates.

Create and edit a bill of materials.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
All students will be required to complete a set of competencies measured through assignments, exams, and quizzes and achieving a cumulative average of 70%.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for DRAF 126

DRAF127 - CATIA V5 Level III

Overview

Subject
Industrial Drafting/CAD Techn

Academic Department
Adv Manufacturing/Fabrication

School
Business, Entrepreneurshp, PD

Course Description
Explores the use of the drafting workbench and surfacing. Covers the application of dimensions and tolerances, and the creation of advanced views. Instruction in surfacing includes extruding and the creation of simple and complex surfaces in the generative shape design workbench.

Course Pre-requisite(s)
DRAF123 Introduction to CATIA V5

Credit Hours
2

Total Contact Hours
Total Instructor Contact Hours:
32

Total Student Contact Hours:
32

Course Fee
40

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics
1. Working in the Drafting Work Bench
2. Generating views in Drafting Work Bench
3. Application of dimensions, tolerances, notes and text in Drafting Work Bench
4. Surfacing in the Generative Shape Design (GSD) Work Bench
5. Making a solid part from surfaces

Configure dimensioning styles.

Apply various types of tolerance dimensions.

Apply various types of symbols found on a detail drawing.

Apply various types of call-outs/notes on a detail drawing.

Construct advanced views that are shown on a detail drawing.

Construct a complex surface by use of surfacing tools.

Make a solid model from a surface.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
All students will be required to complete a set of competencies measured through drawings, tests, written assignments, and achieving a cumulative average of 60% or above.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for DRAF 127

DRAF130 - Technical Descriptive Geometry

Overview

Subject
Industrial Drafting/CAD Techn

Academic Department
Adv Manufacturing/Fabrication

School
Business, Entrepreneurshp, PD

Course Description
Covers advanced projection techniques. Utilizes auxiliary views to manipulate geometry and define relationships between points, lines, surfaces, and solids. Also covers revolution, intersections, solids, and developments.

Course Pre-requisite(s)
DRAF110 Intro Industrial Drafting

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
77

Total Student Contact Hours:
77

Course Fee
45

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
Approval for prior college-level learning will be based on drafting instructor review of a student portfolio AND a student interview.

Goals, Topics, and Objectives

Core Course Topics

1. Principles of orthographic projection
2. Placement and use of work lines
3. Application of orthographics to obtain necessary views
4. Identify status of geometry from given projections
5. Obtain needed views through use of projection
6. Secondary Auxiliary Views
7. Find relationships between given geometry
8. Hihedral angles

Comprehend the basic principles of orthographic projection.

Properly and accurately place and use work lines in the making of a mechanical drawing using orthographic projection.

Use orthographic projection to manipulate geometry to arrive at the necessary views on a mechanical drawing.

Apply the correct sequence of steps to obtain a necessary view.

Interpret a mechanical drawing that is made in orthographic projection.

Find the interception of surfaces piercing surfaces.

Apply procedures to determine the interception of a surface piercing a solid.

Find the solution of projection problems with the use of true length line, point view of a line, the edge view of a plane, and the true size and shape of a plane.

Derive a specified view by the use of auxiliary projection.

Demonstrate the ability to solve a projection problem given a set of criteria.

Find and measure spatial relationships between points, lines, and surfaces.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
All students will be required to complete a set of competencies measured through drawings, tests, written assignments, and achieving a cumulative average of 60% or above.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for DRAF 130

DRAF131 - UG NX Level I - Introduction

Overview

Subject
Industrial Drafting/CAD Techn

Academic Department
Adv Manufacturing/Fabrication

School
Business, Entrepreneurshp, PD

Course Description
Introduces the basics of UG NX and its functionality. Utilizes modeling, sketch creation, drafting, and assembly task environments to create and edit models that are properly constructed and constrained.

Course Pre-requisite(s)
DRAF120 Intro to CAD or DRAF123 Introduction to CATIA V5 or related work experience or Instructor Permission

Credit Hours
2

Total Contact Hours

Total Instructor Contact Hours:
32

Total Student Contact Hours:
32

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Sketch Task Environment
2. Model Task Environment
3. Drafting Application
4. Assembly

Create, fully constrain, and apply good editing techniques to a sketch.

Use solid creation commands to develop a 3-dimensional (3D) model from a properly constrained sketch.

Apply basic orthographic principles in creating 2-dimensional (2D) mechanical drawings.

Employ basic assembly techniques.

Modify and edit 3D solid models.

Develop base views, auxiliary views, and types of section views.

Interpret and manipulate the part navigator.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
All students wil be required to complete a set of competencies measured through assignments, exams, and quizzes, and achieve a cumulative average of 70% in order to be successful in the course.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for DRAF 131

DRAF132 - UG NX Level II - Intermediate

Overview

Subject
Industrial Drafting/CAD Techn

Academic Department
Adv Manufacturing/Fabrication

School
Business, Entrepreneurshp, PD

Course Description
Builds on UG NX concepts introduced in DRAF-131. Explores different task environments. Topics include part families, expressions, assembly simulation, animation, and functional application of dimensions in drafting techniques for manufacturing.

Course Pre-requisite(s)
DRAF131 UG NX Level I - Introduction

Credit Hours
2

Total Contact Hours

Total Instructor Contact Hours:
32

Total Student Contact Hours:
32

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Dimensions
2. Detail Views
3. Section Views
4. Auxiliary Views
5. Exploded Views
6. Bill of Materials
7. Revision Schedule
8. Annotation, Text, and Notes
9. Expressions
10. Assembly and Assembly Drawings
11. Assembly Animation

Apply dimensions to orthographic views for manufacturing.

Appy text, notes, and any other non-graphical features to base views.

Insert bill of material, revision schedule, title block, and border into a drawing.

Create functional detail drawings.

Establish global annotation preferences.

Constrain and manipulate assembly components.

Utilize trace lines for exploded views.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
All students wil be required to complete a set of competencies measured through assignments, exams, and quizzes and achieve a cumulative average of 70%.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for DRAF 132

DRAF133 - UG NX Level III - Advanced

Overview

Subject
Industrial Drafting/CAD Techn

Academic Department
Adv Manufacturing/Fabrication

School
Business, Entrepreneurshp, PD

Course Description
Builds on concepts presented in DRAF-132. Explores advanced techniques and topics, including manipulating, analyzing components, and creating new parts within existing assemblies as well as basic surfacing techniques.

Course Pre-requisite(s)
DRAF132 UG NX Level II - Intermediate

Credit Hours
2

Total Contact Hours

Total Instructor Contact Hours:
32

Total Student Contact Hours:
32

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Advanced Assemblies
2. Advanced Assembly Components
3. Basic Surfacing Techniques
4. Advanced Modeling Techniques

Manipulate and analyze components part files.

Add, constrain, and modify components in assemblies.

Apply basic surfacing techniques.

Create and modify new parts within existing assemblies.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
All students wil be required to complete a set of competencies measured through assignments, exams, and quizzes and achieve a cumulative average of 70%.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for DRAF 133

DRAF134 - UG NX Level IV - Applications

Overview

Subject
Industrial Drafting/CAD Techn

Academic Department
Adv Manufacturing/Fabrication

School
Business, Entrepreneurshp, PD

Course Description
An advanced-level industrial applications course that examines how to create 3-dimensional (3D) wireframe geometry, develop 3D models using surfacing functions, construct complex surfaces, create and operate kinematic simulations, and operate assembly simulations.

Course Pre-requisite(s)
DRAF133 UG NX Level III - Advanced

Credit Hours
2

Total Contact Hours

Total Instructor Contact Hours:
32

Total Student Contact Hours:
32

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Surfacing Tools and Commands
2. Modeling from Sheet Surfacing
3. Assembly Simulation
4. Kinematic Simulation

Create 3D wireframe geometry.

Make 3D models from sheet surfacing.

Construct complex surfaces by using surfacing tools.

Create kinematic simulation.

Operate kinematic simulation.

Operate an assembly simulation.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
All students will be required to complete a set of competencies measured through assignments, exams, and quizzes and achieving a cumulative average of 70%.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for DRAF 134

DRAF142 - Industrial Detailing

Overview

Subject
Industrial Drafting/CAD Techn

Academic Department
Adv Manufacturing/Fabrication

School
Business, Entrepreneurshp, PD

Course Description
Explores the making of working drawings using proper dimensioning techniques. Showing necessary views, placement of dimensions, use of different dimensioning styles, and calculation of tolerances are the basis of instruction. The function and relationship of mating parts in an assembly are considered when dimensioning to insure proper fit and function. Threads, fasteners, and common manufacturing operations are applied and dimensioned. Standard and commercial parts are selected from catalogs. Setup and application of CAD dimensioning styles and tolerances are utilized.

Course Pre-requisite(s)
DRAF110 Intro Industrial Drafting and DRAF120 Intro to CAD

Credit Hours
4

Total Contact Hours

Total Instructor Contact Hours:
92

Total Student Contact Hours:
92

Course Fee
45

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Prepare a drawing to be dimensioned.
2. Placement and spacing of dimensions on a drawing.
3. Dimensioning methods.
4. Part geometry, process, and function.
5. Use of datums.
6. Tolerancing/fit of parts.
7. Threads, fasteners, and locators.
8. Set up of dimensioning standards in CAD.
9. Dimensioning and tolerancing in CAD.
10. Geometric Dimensioning, and Tolerancing (GD&T).
11. Detail Drawings.

Draw an object correctly in orthographic projection to show all necessary views.

Establish and use a datum for dimensioning.

Use a datum for conventional, chart, and o-line dimensioning.

Calculate and apply tolerance dimensions to a part.

Draw and dimension a thread.

Draw and dimension common machining operations.

Set-up dimensioning parameters in a CAD drawing.

Properly dimension a CAD drawing.

Apply tolerance dimensions to a CAD drawing

Demonstrate basic knowledge of geometric dimensioning & tolerancing terms.

Demonstrate an ability to recognize individual parts of an assembly.

Create surfaces of a part in relation to others parts in an assembly.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
All students will be required to complete a set of competencies measured through drawings, tests, written assignments, and achieving a cumulative average of 60% or above.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for DRAF 142

DRAF210 - Die Design

Overview

Subject
Industrial Drafting/CAD Techn

Academic Department
Adv Manufacturing/Fabrication

School
Business, Entrepreneurshp, PD

Course Description
Focuses on advanced drawing techniques in the layout and design of production press work dies. Typical dies covered are blank, cam pierce, form, cutoff, draw, and progressive. Press computations and accessories are put in perspective as they relate to design problems. Drawing assignments are done extensively on CAD.

Course Pre-requisite(s)
DRAF130 Technical Descriptive Geometr, DRAF142 Industrial Detail, and MATH100 Basic Tech Mathematics or above

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
77

Total Student Contact Hours:
77

Course Fee
25

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Stamping Die Operations and Types of Stamping Dies
2. Press Types and Quick Die –Change Systems
3. Steps to Design a Die, Standard Die Parts
4. Work piece Part Processing
5. Material Specifications for Work pieces and Components
6. Material Strip Layout Analysis and Scrap Strip Analysis
7. Calculation of Die Clearance, Blanking Area, Blanking Force,
8. Die Mechanisms, Stock Gages, Stock Stripping and Feed Mechanisms
9. Die Assembly Drawing Practices Dimensions and Notes

- Identify standard die components.
- Select standard components from manufacturers catalogs.
- Define the function of die components.
- Analyze a detail drawing of part to be produced in a die and identify the types of die processes needed to produce the part.
- Produce a material strip layout for a blanked part.
- Design and draw a die member for a blank.
- Design and draw a punch member for a blank.
- Recognize the difference between blanking and piercing.
- Compute standard press and material calculations given tables and/or formulas.
- Apply standard detailing practices for drawing and dimensioning die components.
- Create assembly drawings of die components.
- Analyze die assembly drawings to recognize a given dies function and components.
- Use and apply terminology of die making processes, part production processes, and material specification.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
All students will be required to complete a set of competencies measured through drawings, tests, written assignments, and achieving a cumulative average of 60% or above.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for DRAF 210

DRAF220 - Machine Element Drafting

Overview

Subject
Industrial Drafting/CAD Techn

Academic Department
Adv Manufacturing/Fabrication

School
Business, Entrepreneurshp, PD

Course Description
Focuses on the study of mechanisms, their motion, and related skeletal construction. Calculations are made to determine size and capacity requirements in the design of machine elements. Industrial techniques are applied to detail drawing of various machine parts. Drawing assignments are done extensively on CAD.

Course Pre-requisite(s)
DRAF130 Technical Descriptive Geometr, DRAF142 Industrial Detail, and MATH110 Intermediate Algebra or above

Credit Hours
2

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
25

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. The design process
2. Machine parts, processes, function
3. Mechanisms and their function
4. Standard and commercial parts
5. Calculations
6. Drawing format and presentation

- Identify critical surfaces and relationships between mating machine parts.
- Apply steps for the design of a mechanism in a sequential order.
- Differentiate a part that needs to be manufactured for a mechanism from a part that can be purchased or taken from a standard book.
- Select a part needed for a mechanism from a commercial catalog or standard book.
- Utilize a purchased part in a mechanism using the data from a commercial catalog.
- Identify moving parts from static parts in a mechanism.
- Identify load-bearing members in a mechanism.
- Calculate values and load/power requirements in the design of a mechanism.
- Design a mechanism to satisfy a design problem taking into account its function and load/power calculations.
- Express a design for a mechanism with a finished mechanical drawing.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
All students will be required to complete a set of competencies measured through drawings, tests, written assignments, and achieving a cumulative average of 60% or above.
Texts
N

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for DRAF 220

DRAF230 - Jigs, Fixtures, and Tools

Overview

Subject
Industrial Drafting/CAD Techn

Academic Department
Adv Manufacturing/Fabrication

School
Business, Entrepreneurshp, PD

Course Description
Covers advanced techniques in design, layout, and detail of production tooling. Consideration is given to locating, clamping, and tolerancing a jig and fixture for the manufacture of an industrial part. Standard parts catalogs and library reference materials are used to provide guidance in solving design problems. Drawing assignments are done extensively on CAD.

Course Pre-requisite(s)
DRAF130 Technical Descriptive Geometr, DRAF142 Industrial Detail, and MATH100 Basic Tech Mathematics or above

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
77

Total Student Contact Hours:
77

Course Fee
25

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
Approval for prior college-level learning will be based on drafting instructor review of a student portfolio AND a student interview.

Goals, Topics, and Objectives

Core Course Topics
1. The Purpose of Tooling and Tool Design Objectives
2. Types of and Classification of Jigs and Fixtures
3. Principles of Locating and Support of the Workpiece
4. Principles of Clamping and Workholding
5. Workpiece Analysis and Part Processing
6. Dimensioning Assembly Drawings and Details
7. Template Jigs, Plate Jigs and Fixtures, Angle Plate Jigs and Fixtures, Channel and Box Jigs, Vice Jaw Jigs and Fixtures
8. Power Workholding and Modular Tools Welding and Inspection Tooling
9. Tooling Requirements for Numerical Controls NC-CNC
10. Tool Materials

Identify common Jig and Fixture components.

Define common Jig and Fixture terms.

Recognize different types of Jigs and Fixtures.

Determine what manufacturing processes will need to be employed to produce a part.

List the sequence of machining operations on a plan of production.

Sketch the workpiece in its As Received Condition for each operation.

Create a concept sketch of a jig assembly given a part detail drawing, plan of production, and the description of a workpiece requiring a machining operation.

Outline components on a jig or fixture assembly drawing.

Create a CAD Detail drawing dimensioned with datums and tolerances according to ANSI GDT standards.

Calculate tool tolerances for locator size and location given a detail drawing of a workpiece.

Select standard components from manufacturers catalogs.

Define the function of Jig and Fixture components.

Analyze a detail drawing of part to be produced in a Jig or Fixture and identify the processes needed to produce the part.

Design and draw a locating member for a jig.

Design and draw a clamping system.

Apply standard detailing practices for drawing representation and dimensioning of tooling components.

Create assembly drawings of tooling and tool components.

Analyze tooling assembly drawings to recognize a given tools function and components.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
All students will be required to complete a set of competencies measured through drawings, tests, written assignments, and achieving a cumulative average of 60% or above.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for DRAF 230

DRAF240 - Product Drawing

Overview

Subject
Industrial Drafting/CAD Techn

Academic Department
Adv Manufacturing/Fabrication

School
Business, Entrepreneurshp, PD

Course Description
Examines the demands of product drafting. The design process is applied in the development of a product with consideration given to its function, fix, aesthetics, ergonomics, and its ability to be economically manufactured. Drawing assignments are done extensively on CAD.

Course Pre-requisite(s)
DRAF130 Technical Descriptive Geometr, DRAF142 Industrial Detail, and MATH100 Basic Tech Mathematics or above

Credit Hours
2

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
25

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
Approval for prior college-level learning will be based on drafting instructor review of a student portfolio AND a student interview.

Goals, Topics, and Objectives

Core Course Topics
1. Elements of a product
2. Elements of design
3. Materials and processes
4. Design considerations and processes
5. Develop product concept
6. Drawing a product

Identify elements of good design including: materials, manufacturability, functionality, durability, cost, and appearance.

Evaluate a product and identify elements of good and poor design.

Express a design concept through the use of a sketch.

List considerations of function, cost, materials, manufacturability, appearance, and durability that are involved in the design of a product.

Design a product incorporating the elements of good design.

Design a product to perform a specified function within given parameters and specifications.

Effectively express a design for a product using principles of orthographic projection in a finished mechanical drawing and/or a physical model.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
All students will be required to complete a set of competencies measured through drawings, tests, written assignments, and achieving a cumulative average of 60% or above.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for DRAF 240

DRAF255 - Advanced Techniques

Overview

Subject
Industrial Drafting/CAD Techn

Academic Department
Adv Manufacturing/Fabrication

School
Business, Entrepreneurshp, PD

Course Description
Examines the use of Computer-aided design (CAD) in advanced operations of making three-dimensional models. Solids analysis and the manipulation of geometry is explored utilizing current CAD software. Concepts of parametric modeling, drafting principles are reviewed and developed as they relate to solid model geometry.

Course Pre-requisite(s)
DRAF110 Intro Industrial Drafting and DRAF120 Intro to CAD

Course Co-requisite(s)
DRAF130 Technical Descriptive Geometr and DRAF142 Industrial Detail

Credit Hours
4

Total Contact Hours
Total Instructor Contact Hours:
92

Total Student Contact Hours:
92

Course Fee
40

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Drawing set up, establish standards
2. Creation of 3D parts
3. Changing a 3D part
4. Place 3D part into an assembly: orient, constrain, and animate
5. Place 3D part into an assembly: orient, constrain, and animate
6. Utilizing dimensions and text in drafting
7. Creating a part by use of surfaces

Create three-dimensional (3-D) drawings.

Create complex three-dimensional surfaces.

Construct three-dimensional geometric objects.

Insert three-dimensional solid geometric objects into an assembly.

Demonstrate the creation of basic three-dimensional solids.

Apply various techniques to create advanced three-dimensional solid models.

Explain the differences between wireframe, surface, and solid models.

Orient 3D models in the world coordinate system.

Create non-planar surfaces of various shapes.

Create 3D solids of basic geometric shapes by extruding and revolving profile objects.

Modify a solid model to edit faces and edges.

Understand and utilize the drafting environment and its properties.

Animate assemblies.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
All students will be required to complete a set of competencies measured through drawings, tests, written assignments, and achieving a cumulative average of 60% or above.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for DRAF 255

DRAF260 - Advanced CAD Application Solid Modeling

Overview

Subject
Industrial Drafting/CAD Techn

Academic Department
Adv Manufacturing/Fabrication

School
Business, Entrepreneurshp, PD

Course Description
Covers three-dimensional, feature-based parametric solid CAD. Students create complex three-dimensional parametric models and then generate two-dimensional views from those CAD models. Single parts and assemblies are developed, constrained, and manipulated in the modeling process.

Course Pre-requisite(s)
DRAF110 Intro Industrial Drafting and DRAF120 Intro to CAD

Course Co-requisite(s)
DRAF130 Technical Descriptive Geometr and DRAF-142

Credit Hours
4

Total Contact Hours
Total Instructor Contact Hours:
92

Total Student Contact Hours:
92

Course Fee
40

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
Interview Portfolio

Goals, Topics, and Objectives

Core Course Topics

1. Use of computer: operating system, file system, hardware
2. Configure the CAD environment
3. Sketching and constraining
4. Building a solid model
5. Building a solid model from surfaces
6. Editing a model
7. Use of the Drafting environment
8. Use of the Assembly environment
9. Use of animation in an assembly

Sketch 2D geometry using 3D parametric software.

Constrain 2D geometry using dimensions and geometric constraints.

Demonstrate use of interface, command entry and sequence, file preferences, and options in the construction of a model.

Create a basic parametric model.

Create features on model.

Create a part by use of surfacing commands.

Change a model by editing the sketch.

Change a part by use of a history tree.

Apply techniques needed for mathematical and scientific problem solving.

Construct working drawings and views of parametric models using acceptable industry standards.

Revise and update working drawings.

Differentiate between dimensioning and tolerancing methods.

Assemble parts using parametric assembly constraints.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
All students will be required to complete a set of competencies measured through drawings, tests, written assignments, and achieving a cumulative average of 60% or above.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for DRAF 260

DRAF297 - Spec Topics Industrial Drafting Technolo

Overview

Subject
Industrial Drafting/CAD Techn

Academic Department
Adv Manufacturing/Fabrication

School
Business, Entrepreneurshp, PD

Course Description
Designed to explore selected topics as determined by the academic department and the instructor with emphasis on current drafting technology trends. The specific special topic will be announced together with the prerequisites each term. Students can repeat the course when different topics are offered, earning credit for each different topic.

Course Pre-requisite(s)
Instructor Permission

Credit Hours
1

Total Contact Hours

Total Instructor Contact Hours:
16

Total Student Contact Hours:
16

Academic Level
Undergraduate

Goals, Topics, and Objectives

Course Goals
To provide the instructional flexibility needed to address the specific needs of a targeted student population.
Core Course Topics
To be determined by the instructor.

To be developed by the instructor for each individual offering.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
All students will be required to complete a comprehensive final examination that assesses the learning of course objectives. This exam must be weighted in a manner so that this exam score is worth a minimum of fifteen percent of the final course grade. All additional assessment of student achievement is left to instructor discretion.

General Course Requirements and Recommendations
To be determined by the instructor. Detailed course syllabi for each section of DRAF297 Spec Topics Indust Draf Techno must be approved by the Department prior to the course being offered.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for DRAF 297

DRAF298 - Spec Topics Industrial Drafting Technolo

Overview

Subject
Industrial Drafting/CAD Techn

Academic Department
Adv Manufacturing/Fabrication

School
Business, Entrepreneurshp, PD

Course Description
Designed to explore selected topics as determined by the academic department and the instructor with emphasis on current drafting technology trends. The specific special topic will be announced together with the prerequisites each term. Students can repeat the course when different topics are offered, earning credit for each different topic.

Course Pre-requisite(s)
Instructor Permission

Credit Hours
2

Total Contact Hours

Total Instructor Contact Hours:
32

Total Student Contact Hours:
32

Academic Level
Undergraduate

Goals, Topics, and Objectives

Course Goals
To provide the instructional flexibility needed to address the specific needs of a targeted student population.
Core Course Topics
To be determined by the instructor.

To be developed by the instructor for each individual offering

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
All students will be required to complete a comprehensive final examination that assesses the learning of course objectives. This exam must be weighted in a manner so that this exam score is worth a minimum of fifteen percent of the final course grade. All additional assessment of student achievement is left to instructor discretion.

General Course Requirements and Recommendations
To be determined by the instructor. Detailed course syllabi for each section of DRAF298 Spec Topics Indust Draf Techno must be approved by the Department prior to the course being offered.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for DRAF 298

EDU250 - Humanities & Performing Arts Educators

Overview

Subject
Pre-Education

Academic Department
Health, Education, and Human Services

School
Health & Human Services

Course Description
This course studies the aspects of human society and culture through an education lens. This course prepares the student majoring in education to incorporate the various visual and performing arts from multiple humanities into everyday education curricula. The course will cover the fundamental and formal elements, the major periods, styles and philosophies, as well as the functions and processes of the humanities and visual and performing arts. This course provides the educator with knowledge on how to effectively employ those creative processes through collaboration, communication, cooperation, and interaction within the classroom. This is an interactive course where the instructor, guest speakers, and students present topics. Knowledge will be applied through small and large group discussions and projects. Students participation requires completion of projects/assignments both during and outside of class. At least one humanities/fine arts field trip will be planned as an integral part of the course.

Course Pre-requisite(s)
ENG131 Introduction College Writing with a C or better

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
15

Academic Level
Undergraduate

General Education Category
Humanities and Fine Arts

Michigan Transfer Agreement (MTA) Category
Category 5: Humanities and Fine Arts - Applied Degrees, Category 5: Humanities and Fine Arts - Transfer Degrees

Goals, Topics, and Objectives

Core Course Topics

1. History and philosophy of humanities and fine arts.
2. Elements of music in the humanities and fine arts integrated into education curricula.
3. Elements of art in the humanities and fine arts integrated into the education curricula.
4. Elements of dance in the humanities and fine arts integrated into the education curricula
5. Elements of drama in the humanities and fine arts integrated into education curricula.
6. Adapting the humanities and fine arts curricula to address students with special needs.
7. Integrating humanities and fine arts with technology in the classroom.

Discuss the philosophical framework of fine arts and the humanities.

Explain the major periods and styles in humanities and fine arts.

Demonstrate the importance of the humanities as a developmental and motivational process.

Identify, compare, and contrast the basic components of music (rhythm, melody, harmony, tone color, and texture) from a fine arts and humanities perspective.

Organize and assess lesson plans incorporating the humanities and fine arts.

Identify, compare, and contrast the formal elements of art (line, color, shape, space, perspective, dimension, etc.) from a fine arts and humanities perspective.

Identify, compare, and contrast the basic elements of dance from a humanities and fine arts perspective.

Incorporate the creative processes inspired by the humanities and performing arts into an active learning environment.

Identify, compare, and contrast the basic elements of drama from a humanities and fine arts perspective.

Create appropriate lessons to engage all students, including the special needs student, in creative and collaborative activities involving the fine arts and humanities.

Incorporate fine arts and humanities into everyday classroom activities using various learning technologies (computers, web-based learning activities, websites, videos, software, etc.).

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
The academic achievement will be assessed using a combination of quizzes, exams, assignments, presentations, projects, participation, and/or final examination.
Grading Scale
To be determined by the instructor.
Texts
Determined by department faculty

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for EDU 250

EDU256 - Educational Psychology

Overview

Subject
Pre-Education

Academic Department
Health, Education, and Human Services

School
Health & Human Services

Course Description
Applies the principles and theories of educational psychology to teaching and learning in diverse school settings. Topics address all domains of learning and cognition. Theoretical examination includes the academic development of children socially, emotionally, cognitively, and physically. This course also includes the following content areas: special education, multicultural educational programs, principles and teaching methodologies, managing classroom discipline, motivating students to learn, leading classroom instruction, and assessing K-12 differences in students' learning. It is recommended that EDU-256 not be taken concurrently with PSY-152.

Course Pre-requisite(s)
ENG132 College Writing and Research and PSY131 Introductory Psychology both with a C grade or higher

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
10

Academic Level
Undergraduate

General Education Category
Social Sciences

Michigan Transfer Agreement (MTA) Category
Category 4: Social Sciences - Applied Degrees, Category 4: Social Sciences - Transfer Degrees

Goals, Topics, and Objectives

Course Goals
To provide an integrative approach in which students will be expected to combine theoretical concepts with practical application. Students will be able to increase their knowledge of learners' learning processes. They will also be able to apply their knowledge of educational psychology theories and effective practices through classroom methods.

This course addresses the Michigan Department of Education's core teaching practices and teacher standards.

Core Teaching Practices
Lower Elementary PK-3 Education Preparation Standards
Upper Elementary 3-6 Education Preparation Standards
Professional Standards 5-12
Special Education Preparation Standards

Core Course Topics
1. Educational Psychology Theorists and their theories
2. Educational Development of Children
3. Learning and Cognition
4. Student Motivation
5. Classroom Management Theories and Interventions
6. Methodologies and Instruction
7. Student Differences and Diversity
8. Testing and Measurement
9. Special Education
10. Current Educational Issues and Trends

Explain the concept of pedagogy and its implication for academic achievement.
Identify educational psychology theorists and their pedagogical practices.
Compare and contrast the different social developmental stages of children within the learning setting.
Compare and contrast the different emotional developmental stages of children within the learning setting.
Compare and contrast the different physical developmental stages of children within the learning setting.
Compare and contrast the different cognitive developmental stages of children within the learning setting.
Diagram the information processing system and explain its application to retention and retrieval.
Identify memory facilitation strategies and reasons for forgetting.
Demonstrate role modeling to facilitate learning.
Describe the techniques of operant learning (reinforcement and punishment).
Identify personal and classroom factors that influence motivation to learn.
Describe how students and teachers can enhance academic achievement.

Develop effective classroom management interventions.

Discuss appropriate and inappropriate use of consequences.

Compare and contrast direct teaching and constructivist teaching designs.

Describe the steps of the problem-solving process.

Define and describe ableism, its intersections with other oppressions (e.g., linguicism, racism, sexism, trans/homophobia, etc.), and how inclusive teaching practices can impact student experiences (academic, social, disciplinary) and identities and transform learning communities. Explain how socioeconomic status, ableism, and gender play a role in the educational attainment of children.

Generate ways to address the different learning styles of students.

Design a lesson to reach children of different intelligence(s).

Discuss the rise of multiculturalism and its impact on educational programs. The student will be aware of complex issues involving traumatic experiences. This includes learning about the development of the whole child, including but not limited to cultural and linguistic context, economic conditions of families, social-emotional needs, trauma, health status and disabilities, peer and adult relationships, childrens individual and developmental variations, opportunities to play and learn, family and community characteristics, and the influence and impact of technology and the media.

Identify the purposes for testing.

Identify ways to measure student learning.

Compare norm-referenced grading to criterion-referenced grading. The student will compare and contrast effective testing procedures to ineffective testing procedures as well as compare and contrast the different purposes for screening formative and cumulative testing (i.e., achievement vs. diagnostic).

Describe the purpose of special education laws.

Discuss the pros and cons of labeling children and tracking.

Discuss the different special education settings.

Describe the Individualized Education Plan (IEP) process.

Discuss and analyze contemporary educational issues and their implications for teaching and/or educational policy.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment may include the following but be limited to:

- Lesson Plan
- Test Analysis
- Group presentations
- Self-designed rubric
- Professional Article/Video Critique/Analysis
- Classroom Management Case Studies
- Classroom observations

General Course Requirements and Recommendations
The recommendation is that this course should be taken before EDU201 Introduction to Education and EDU202 Intro to Education Practicum.

Grading Scale
As determined by the instructor.

Texts
Textbook(s) will be determined by the program faculty.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for EDU 256

EDU260 - History in Elementary Schools

Overview

Subject
Pre-Education

Academic Department
Health, Education, and Human Services

School
Health & Human Services

Course Description
Explores topics in history taught in grades K-8 and prepares students to teach these topics. This course presents a survey of Michigan and American history through Reconstruction, as well as early world history. Core course topics may include but not be limited to the following: social studies in grades K-8, Grade Level Content Expectations, using primary and secondary resources, connecting self to the local community, Michigan history and government, American history and government - early settlers through Reconstruction, the purpose, structure and function of government, core democratic values, early Western hemisphere history, and early Eastern hemisphere history.

Course Pre-requisite(s)
GEOG132 World Regional Geography can be taken previously or concurrently; ENG132 College Writing and Research with a C grade or better can be taken previously or concurrently.

Credit Hours

3

Total Contact Hours

Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Academic Level
Undergraduate

General Education Category
Social Sciences

Michigan Transfer Agreement (MTA) Category
Category 4: Social Sciences - Applied Degrees, Category 4: Social Sciences - Transfer Degrees

Goals, Topics, and Objectives

Course Goals
This course seeks to increase student content knowledge of Geography, World History, American, and Michigan history and apply this to an elementary setting. Students will apply their knowledge of educational concepts and practices to the field of social studies education.

This course addresses the Michigan Department of Education's core teaching practices and teacher standards.

Core Teaching Practices
Lower Elementary PK-3 Education Preparation Standards
Upper Elementary 3-6 Education Preparation Standards
Professional Standards 5-12
Special Education Preparation Standards

Core Course Topics

1. Social Studies in grades K-8, Grade Level Content Expectations
2. Using Primary and Secondary Resources
3. Connecting Self to Local Community
4. Michigan History and Government
5. American History and Government - Early Settlers through Reconstruction
6. Purpose, Structure and Function of Government
7. Core Democratic Values
8. Early Western Hemisphere History
9. Diverse Cultural Heritage Geography

Apply methods of social studies investigation.

Evaluate primary and secondary historical sources for use in the K-8 classroom.

Identify appropriate Grade Level Content Expectations.

Discuss the purpose of the C3 Framework.

Analyze methods of building civic responsibility and citizenship in children.

Analyze the foundations of the Core Democratic Values.

Demonstrate our diverse cultural heritage and explain how it informs our civic judgments.

Apply knowledge of American government and politics to explain current political decisions or debates.

Compare and contrast institutional structures of American local, state, and national governments.

Identify significant developments in American history through the Reconstruction period.

Identify significant events in early World History.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of academic achievement may include, but not be limited to case studies, unit quizzes, community research projects, research papers, group assignments, portfolio review, essay, mid-term and final exams.

At least 50% of assessments are pedagogically relevant to elementary classrooms and reflective assignments

Grading Scale
As determined by the instructor.

Texts
As determined by the department.Recommended (not required) textbook: Fritzer, P. (2010). Social Studies Content for Elementary and Middle School Teachers. Boston, MA: Allyn & Bacon, Inc.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for EDU 260

EDU295 - Exceptional Children in Early Childhood

Overview

Subject
Pre-Education

Academic Department
Health, Education, and Human Services

School
Health & Human Services

Course Description
Prepares early childhood professionals to teach young children with exceptional needs as well as collaborate with their families in an early childhood classroom or community based special education environment. Provides an overview of special education history, theory, models and laws pertaining to young children. This course includes the different exceptional needs young children may have as well as behavioral techniques designed to address them. Disabilities reviewed in this course will include but are not limited to developmental delay, autism, visual, hearing, and physical impairment, cerebral palsy, spina bifida, muscular dystrophy, spinal cord injury, and Down syndrome. This course provides the learner with an understanding of inclusion, community integration, and family/professional collaboration.

Course Pre-requisite(s)
ENG131 Introduction College Writing and PSY131 Introductory Psychology both with a C grade or higher

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
10

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Special Education Theory and Law
2. Individualized Family Service Plan (IFSP) and Individualized Education Plan (IEP)
3. Community and Parent Collaboration
4. Early Intervention Services
5. The Learning Environment
6. Emotional and Behavioral Techniques
7. Developmental Delay
8. Autism
9. Congenital Disorders/Birth Defects
10. Emotional and Behavioral Disorders
11. Learning Disorders
12. Hearing Impairment
13. Visual Impairment
14. Physical and Other Health Impairments

Apply special education theory to practice.

Identify the different special education laws and practices.

Compare and contrast an IFSP to the IEP referral process.

Compare and contrast different early childhood assessment tools.

Collect behavioral data on a child with exceptional needs.

Identify and locate effective early childhood intervention services.

Create a barrier free exceptional child learning environment.

Explain the importance of community and parent collaboration.

Identify the multiple at-risk factors contributing to the development of the following exceptional child disorders: developmental delay, autism, emotional and behavioral disorders, learning disorders, Attention Deficit/Hyperactivity Disorder (ADHD), congenital disorders/birth defects, hearing impairment, visual impairment, physical and other health impairments - fine and gross motor skills.

Identify the characteristics of young children who demonstrate the following exceptional child disorders: developmental delay, autism, emotional and behavioral disorders, learning disorders, ADHD, congenital disorders/birth defects, hearing impairment, visual impairment, physical and other health impairments - fine and gross motor skills.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment may include but not be limited to:

1. Special education professional interview.
2. Case study identifying the disability the student has as well as locating resources for the parents of the child.
3. Create measurable goals and objectives.
4. Create their own early childhood assessment for a disorder.
5. Complete an IFSP/IEP.
6. Create a barrier free early childhood classroom including space, material, equipment, developmentally appropriate centers.

7. Write up progress notes following a mock meeting with a family regarding their child.
8. Collect data on a child's behavioral progress from a case study.
9. Written or objective assessments.

General Course Requirements and Recommendations
This course should be taken before EDU201 Introduction to Education and EDU202 Intro to Education Practicum.

Grading Scale
As determined by the instructor.
Texts
Textbooks selection as determined by the department.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for EDU 295

EDU296 - Exceptional Child

Overview

Subject
Pre-Education

Academic Department
Health, Education, and Human Services

School
Health & Human Services

Course Description
Focuses on the characteristics, identification, assessment, and instruction of students with exceptionalities. Explores special education children's syndromes and their learning environments. Covers how to provide free and appropriate academic services to children with exceptionalities. Includes the theories, laws, and procedures surrounding special education. Course topics also include specific learning disabilities, autism, mild and severe behavior disorders, emotional impairment, intellectual disability, visual and hearing impairments, speech impairment, giftedness, physical impairments and chronic medical conditions. Additional discussions revolve around different special education learning environments such as inclusion, mainstreaming, pullout programs, resource rooms, co-teaching environments, and the self-contained classroom.

Course Pre-requisite(s)
PSY131 Introductory Psychology with a C grade or better

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
10

Academic Level
Undergraduate

General Education Category
Social Sciences

Michigan Transfer Agreement (MTA) Category
Category 4: Social Sciences - Applied Degrees, Category 4: Social Sciences - Transfer Degrees

Goals, Topics, and Objectives

Course Goals
This course seeks for students to become familiar with the characteristics, identifications, and assessment of students with exceptionalities. This course addresses the Michigan Department of Education's core teaching practices and teacher standards.

Core Teaching Practices
Lower Elementary PK-3 Education Preparation Standards
Upper Elementary 3-6 Education Preparation Standards
Professional Standards 5-12
Special Education Preparation Standards

Core Course Topics
1. Special education terminology, labels and statistics
2. History of special education and the different special education roles
3. The special education policies, practices and programs
4. Addressing the cultural and linguistic diversity of special education students
5. The parent/guardian-professional relationship
6. Family and community social, emotional and economic characteristics
7. Persons with intellectual disabilities
8. Persons with learning disabilities
9. Persons with emotional or behavioral disorders
10. Gifted and talented persons
11. Speech and language disorders
12. Hearing Impairments
13. Visual Impairments
14. Persons with physical or health disabilities
15. Autism
16. Modifying the regular education environment to meet the needs of students with exceptionalities

Define and describe ableism, its intersections with other oppressions (e.g., linguicism, racism, sexism, trans/homophobia, etc.), and how inclusive teaching practices can impact student experiences (academic, social, disciplinary) and identities and transform learning communities.
Synthesize the legislative, historical, and sociological relationships between the disability rights movement, other civil rights movements, and educational equity.
Identify the different policies, practices, and programs related to special education.
Explain the effects of culture and language and their implications on diversity and exceptionalism.
Identify the components of an Individualized Education Plan (IEP).
Explain the IEP process.
Discuss the implications of the law on school practices.
Relate special education theory to educational practice.
Discuss the different special education perspectives and apply them to the field.
Compare and contrast the different roles of the special education professionals as they relate to the families and children they serve.

Identify the different professional group dynamic approaches used to provide educational programs to students with exceptionalities.

Identify and discuss the different familial interrelationships contributing to exceptional children's families.

Compare and contrast the aspects of the different exceptionalities.

Compare and contrast the different special education learning environments.

Analyze the different teaching approaches used with exceptional children within the classroom.

Define and describe ableism, its intersections with other oppressions (e.g., linguicism, racism, sexism, trans/homophobia, etc.), and how inclusive teaching practices can impact student experiences (academic, social, disciplinary) and identities and transform learning communities

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment may include but not be limited to the following assignments:
1. With a partner, or individually, students will create a case study identifying multiple aspects of the exceptional child's home and school environment.
2. Individually, students will conduct an interview on ONE of the individuals given below. Suggestions for interview questions will be discussed in class. The interview will be 3-4 pages typed.
*A special education teacher
*A parent of a special education child
*A disabled teen or adult
*A teacher in an inclusive or co-taught classroom
*An administrator of special education.
3. Individually, students will analyze an article from a special education journal (i.e. Journal of Learning Disabilities, Teaching Exceptional Children). Article critique guidelines will be distributed in class.
4. Students will create a lesson from their major or minor area of study and adapt the lesson to meet the needs of at least two categories of exceptionalities.
5. Multiple choice examinations.
At least 40% of the assessments must be reflective

General Course Requirements and Recommendations
This course should be taken before EDU201 Introduction to Education and EDU202 Intro to Education Practicum.

Grading Scale
As determined by the instructor.
Texts
Textbooks will be determined by the program faculty.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for EDU 296

EDU298 - Foundations of Educ With Pract Exp

Overview

Subject
Pre-Education

Academic Department
Health, Education, and Human Services

School
Health & Human Services

Course Description
An educational foundations and policy studies approach to the field of education. Course topics will include but not be limited to the history of U.S. education, philosophies of education from Plato to the current testing philosophy, multi-culturalism/diversity, and historical records of educational reform movements. Other material covered within the course includes social issues such as socioeconomic status (SES), race, gender, and culture affecting educational achievement, teacher certification process, professional organizations (such as unions) and their purpose, differentiated teaching methods from a diversity perspective, classroom management, and historical changes of school financing. Students will be introduced to lesson planning, instructional techniques, and classroom instruction through their placement in a classroom setting at the grade level/special education area of interest at which the student wishes to teach. They will incorporate integrated essays into their e-portfolio.This course integrates the social foundations approach to the field of education with a 40-hour pre-student teaching practicum. Course reflective topics will include but will not be limited to the history of U.S. education, philosophies of education, multi-culturalism/diversity, educational reform movements, social issues affecting educational achievement, teacher certification process, professional organizations (such as unions) and their purpose, differentiated teaching methods, classroom management, and school financing. Standardized state standards and high-stakes testing will be addressed as well. Students will be introduced to lesson planning, instructional techniques, and classroom instruction during this practicum experience.This course requires a 40-hour off-campus field placement.

Course Pre-requisite(s)
ENG131 Introduction College Writing, ENG132 College Writing and Research, PSY131 Introductory Psychology with a C grade or better.

Course Co-requisite(s)
CIS221 Instruction Tech for Educators can be taken previously or concurrently.

Credit Hours
4

Total Contact Hours
Total Instructor Contact Hours:
62

Total Student Contact Hours:
87

Course Fee
25

Academic Level
Undergraduate

Goals, Topics, and Objectives

Course Goals
To increase student knowledge of the learning environment from a teacher perspective through an experiential approach to learning. Students will apply their knowledge of educational concepts, laws, and practices in the field of education.
Core Course Topics

- The development of teaching skills and their relationship to research
- Becoming a teacher and professional organizations
- Different learning styles and approaches
- Addressing student diversity through effective teaching methods
- Family dynamics and social issues facing schools
- The history of the educational system
- Philosophy of education
- School financing and the governing bodies influencing budgetary concerns.
- School laws and the ethics of teaching
- The impact of school reform
- The relationship between curriculum, standards, and assessment
- Classroom management
- Direct lesson and constructivist approaches to teaching
- State standardized testing and measurement
- Integrating technology into the classroom
- Teacher roles within the educational system
- Societal perspectives of the field of teaching
- Gardner's multiple intelligences and five minds' theories
- Full inclusion
- Diversity within the classroom
- Curriculum and instruction
- Differentiated learning
- Standardized testing
- Philosophy of education
- School law and educational funding
- Social implications on educational process

Compare and contrast the different historical philosophies of education as well as create their own.

Explain how socioeconomic, social, and emotional issues impact student learning.

Integrate social, cultural , and community factors into the reciprocal learning process.

Explain different school laws and the ethics of teaching related to those laws.

Explain the importance as well as the different roles of educational professional organizations.

Compare and contrast the different philosophies of education as well as create their own.

Compare and contrast the different theoretical models on multicultural education.

Analyze different learning styles and methodological approaches from diverse perspectives.

Integrate social, cultural, and community factors into the reciprocal learning process.

Analyze past and current political and social controversial issues pertaining to education.

Explain the history of the American education system as well as its origins from other cultures.

Compare and contrast the different historical educational reform movements within the U.S. school system.

Compare and contrast different curricula, content, and standards driving education from a historical perspective.

Compare and contrast the different philosophies of education as well as create their own

Apply the State standardized testing information on the Michigan Department of Education website to the students educational journey.

Compare and contrast different curricula, content, and standards driving education.

Explain the ways schools are financed and the governing bodies influencing budgetary decisions.

Explain the importance of an effective classroom management, including multi-tiered systems of support (MTSS).

Analyze and apply the family and community social and economic implications on the educational process.

Compare and contrast mastery learning to problem-based learning and identify instances of it in the classroom.

Explain differentiated instruction in detail. Explain how it has been addressed by their practicum teacher.

Apply different approaches in multicultural education at their practicum. Identify and understand the implications of the hidden curriculum on the observed students at the practicum.

Compare and contrast direct lesson approach to a constructivist teaching approach.

Use technology for classroom presentations.

Identify the life experiences and societal perspectives that have influenced their decision to become a teacher.

Interview their classroom teacher regarding inclusion and teaching students with special needs.

Apply different approaches in multicultural education at their practicum.

Explain school funding from a federal, state, and local perspective

Discuss school funding with their practicum teacher.

Create their own philosophy of education.

Apply Gardners multiple intelligence learning styles and other pedagogical perspectives.

Analyze the classroom where they are observing as well as the teacher's effectiveness.

Research practicum site and apply how family and community social-economic factors impact the educational process.

Apply multiple intelligence learning styles and other pedagogical perspectives.

Explain how standardized testing and high-stakes testing as well as the social and academic issues surrounding them affect the students at their practicum.

Identify and understand the implications of the hidden curriculum on the observed students at the practicum.

Analyze different classroom management techniques used within the classroom.

Analyze their classroom lesson plan and video.

Explain how standardized testing and high stakes testing as well as the social and academic issues surrounding them affect the students at their practicum. Analyze and apply the family and community social and economic implications on the educational process. Analyze different classroom management techniques used within the classroom. Analyze their classroom lesson plan and video. Compare and contrast mastery learning to problem-based learning and identify instances of it in the classroom.

Explain school funding from a federal, state, and local perspective.

Analyze the classroom where they are conducting field placement as well as the teacher's effectiveness.

Explain how standardized testing and high stakes testing as well as the social and academic issues surrounding them affect the students at their practicum.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Course assessment may include but not be limited to:

- Small group activities
- Individual projects
- Presentations
- Critical thinking/reflective writing assignments

General Course Requirements and Recommendations
iChat $10 per student

Grading Scale
Standard Letter Grade Points:

- 900-1000 = Exceeds Expectations A
- 899-799 = Meets Expectations B
- 798-690 = Below Expectations C
- 689 and under = Unsatisfactory D/E

Texts
(optional) TextbookSadker, D., Zittleman, K. R., & Koch, M. (2022). Teachers, Schools, and Society: A brief Introduction to Education, 6th Edition, McGraw Hill.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for EDU 298

ELEC103 - Basic Electricity

Overview

Subject
Electrical Engineering Technol

Academic Department
Adv Manufacturing/Fabrication

School
Business, Entrepreneurshp, PD

Course Description
Covers the fundamentals of electricity as applied to the electrical field. Topics include the electron theory, Ohm's Law, circuits, magnetism, inductance, capacitance, and alternating current circuits. Utilizes voltmeters, ammeters, power supplies, signal generators, and oscilloscopes to construct circuits during lab activities. Also utilizes computer simulations. Introduction to writing reports. Labs involve breadboards and the above-mentioned equipment and components. Extensive laboratory activities.

Credit Hours
4

Total Contact Hours
Total Instructor Contact Hours:
92

Total Student Contact Hours:
92

Course Fee
50

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
Minimum Departmental Exam Score

80% on written test. 95% on lab test

Other Exam Details

The credit for prior learning exam includes a written portion and a lab portion.

Goals, Topics, and Objectives

Core Course Topics

1. Electron theory, electric charge, and Ohm's Law.
2. Prefixes, voltage sources, and voltmeter usage.
3. Resistor color code, ratings, types, and ohmmeter usage.
4. Ohm's Law.
5. Ammeter usage.
6. Multisim circuit simulation and analysis.
7. Series circuits and circuit breadboarding.
8. Multisim simulation with series circuits.
9. Voltage divider circuits, and open and short circuits.
10. Electrical power.
11. Parallel circuits.
12. Combination circuits.
13. Wheatstone Bridge.
14. Meter loading, cells, and batteries.
15. Soldering activities.
16. Magnetism and electromagnetism.
17. Alternating current and measurement of signals on an oscilloscope with utilization of signal generator.
18. Oscilloscope usage, D.C., A.C., and period measurements.
19. Capacitors and their properties in D.C. and A.C. circuits.
20. Capacitive reactance, RC circuits, filters, and phase shift.
21. RC circuit conditions.
22. Series and parallel RC circuits.
23. Inductors and their properties in D.C. and A.C. circuits.
24. RL circuit conditions.
25. Transformers, voltage and current ratio, and power transfer.
26. Ladder diagrams.
27. Multisim simulation with parallel circuits.
28. Multisim simulation with combination circuits.
29. Construction of capacitive and inductive circuits on breadboards.

Define voltage, current, and resistance and explain the characteristics of each.

Make basic circuit measurements utilizing a voltmeter, a current meter, an ohmmeter, and an oscilloscope.

Explain Ohms Law and the Power Law.

Determine the characteristics of a series circuit.

Determine the characteristics of a parallel circuit.

Analyze series-parallel circuits.

Explain the principles of magnetism and electromagnetism.

Determine and analyze voltage and current values from an A.C. sine wave.

Describe the basic characteristics of an inductor in D.C. and A.C. circuits.

Describe the basic characteristics of a capacitor in D.C. and A.C. circuits.

Evaluate a lab by constructing a written report using data collected in lab

Analyze data acquired in lab using MicroSoft Excel.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement

1. Unit and chapter tests given throughout the semester.
2. Analytical laboratory activities and performance exercises in which students demonstrate an understanding of assigned circuits.
3. Final exam in which common questions are asked covering the units and topics presented throughout the semester. The final exam is worth 25 percent of the course grade.
4. A lab report is worth 10% of the final grade.
5. A lab final exam is required.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for ELEC 103

ELEC106 - Basic Electronics

Overview

Subject
Electrical Engineering Technol

Academic Department
Adv Manufacturing/Fabrication

School
Business, Entrepreneurshp, PD

Course Description
Introduces the fundamentals of solid-state components found in electronic circuits. Topics include solid state diodes, field effect transistors (FET), silicon controlled rectifiers (SCRs), insulated gate bi-polar transistors (IGBTs), buck and boost converters, and bipolar transistors. Discusses characteristics of these components and some basic circuits in which they are commonly used. Utilizes a software program to simulate various electronic circuits. Circuits are constructed in lab using these components. Extensive laboratory activities.

Course Pre-requisite(s)
ELEC103 Basic Electricity or Instructor permission.

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
62

Total Student Contact Hours:
62

Course Fee
40

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
Minimum Departmental Exam Score

80% written exam 95% lab exam

Other Exam Details

The credit for prior learning exam includes a written portion and a lab portion.

Goals, Topics, and Objectives

Core Course Topics

1. Introduction to basic circuits.
2. Introduction to electronic circuit software program.
3. Oscilloscope – D.C. measurements.
4. Oscilloscope – A.C. and time measurements.
5. Solid-state theory and testing of diodes.
6. National Instruments Multisin rectifier circuit analysis.
7. Diode rectifier circuit.
8. Junction Field Effect Transistor theory.
9. Junction Field Effect Transistor characteristic curves.
10. Computer software to develop characteristic curves.
11. Biasing a junction field effect transistor (JFET) amplifier.
12. Junction field effect transistor (JFET) fixed and self-bias amplifier.
13. Bipolar transistor theory.
14. NPN characteristic curves.
15. PNP characteristic curves.
16. Computer software to develop characteristic curves.
17. Common emitter amplifier.
18. Common base amplifier.
19. Common collector amplifier.
20. Circuit analysis using Multisim Software.
21. Buck-Boost Converter circuits.
22. Insulated gate bi-polar transistor (IGBT) circuits.
23. Silicon controlled rectifier SCR circuits.

Describe the basic diode characteristics.
Analyze the operation of a half-wave rectifier circuit.
Describe the basic structure and operation of bipolar junction transistors (BJT).
Analyze and explain the operation of the Bipolar Junction Transistor (BJT) as an amplifier.
Describe the basic structure and operation of a Junction Field Effect Transistor (JFET).
Analyze and explain the operation of a Junction Field Effect Transistor (JFET) as an amplifier.
Analyze and explain the operation of a buck-boost converter circuit.
Analyze and explain the operation of a insulated gate bi-polar transistor (IGBT).
Analyze and explain the operation of silcon controlled rectifier (SCR) circuits.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement

1. Unit and chapter tests given throughout the semester. Tests represent 50 percent of the course grade.
2. Informal and Formal laboratory activities and performance exercises in which students demonstrate an understanding of assigned circuits. Formal laboratory activities are submitted as a written report and represents 25% of the course grade.
3. Final exam in which common questions are asked covering the units and topics presented throughout the semester. The final exam is worth 25 percent of the course grade. A lab final exam is required.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for ELEC 106

ELEC115 - Digital Circuits 1

Overview

Subject
Electrical Engineering Technol

Academic Department
Adv Manufacturing/Fabrication

School
Business, Entrepreneurshp, PD

Course Description
Introduces digital concepts including binary, hexadecimal, and BCD number systems; transistor transistor logic (TTL) and Complementary metal-oxide-semiconductor (CMOS) integrated circuit logic gate technology, Boolean algebra, logic tables, combinational logic, monostable and bistable multivibrators, storage registers and asynchronous counters. Included are Source and Sink output discussions to prepare students for the programmable logic controller (PLC) classes. Extensive discussion about number systems and registers to prepare students for the programmable logic controller (PLC) classes. The use of digital electronic simulation software. Extensive laboratory activities.

Course Pre-requisite(s)
ELEC103 Basic Electricity or Instructor permission.

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
62

Total Student Contact Hours:
62

Course Fee
40

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
Minimum Departmental Exam Score

80% written 95% lab exam

Departmental Exam Details

The credit for prior learning exam includes a written portion and a lab portion.

Goals, Topics, and Objectives

Core Course Topics

1. Digital concepts.
2. Introduction to computer simulation software.
3. Binary, decimal, hexadecimal, and BCD conversions.
4. Computer simulation.
5. Logic probe circuit.
6. Construct logic probe.
7. Logic gate circuits.
8. Logic gate circuits from schematic symbols.
9. Boolean algebra introduction.
10. Logic gate circuits from Boolean expressions.
11. Logic gate circuits and Boolean reduction.
12. Combinational logic.
13. NAND/NOR conversions.
14. Logic gate circuits converting Boolean expressions to all NANDS/NORS.
15. NAND/NOR conversions.
16. Logic gate circuits converting Boolean expressions to all NANDS/NORS.
17. 555 timer circuit.
18. Flip-flops and related devices.
19. Asynchronous counters.
20. Mod 10 and mod 16 asynchronous up-counter.
21. Digital concepts.
22. Source or Sink Outputs.
23. Number systems and registers.

Explain the differences between digital and analog systems.

Describe the parameters of a pulse waveform.

Explain the logic operations of AND, OR, NAND, NOR, and NOT gating circuits.

Convert between Binary, Decimal, Hexadecimal, and BCD number systems.

Apply rules and theorems of Boolean algebra to simplify a Boolean expression.

Utilize NAND or NOR gates to implement any combinational logic function.

Apply troubleshooting techniques to faulty logic circuits.

Utilize a digital electronic simulation software program.

Analyze source or sink components in a circuit.

Evaluate PLC number systems.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement

1. Unit and chapter tests given throughout the semester. Tests represent 50 percent of the course grade.
2. Informal and formal laboratory activities and performance exercises in which students demonstrate an understanding of assigned circuits. Formal laboratory activities are submitted as a written report and represent 25 percent of the course grade.
3. Final exam in which common questions are asked covering the units and topics presented throughout the semester. The final exam is worth 25 percent of the course grade.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for ELEC 115

ELEC120 - Basic Hydraulics

Overview

Subject
Electrical Engineering Technol

Academic Department
Adv Manufacturing/Fabrication

School
Business, Entrepreneurshp, PD

Course Description
Introduces basic hydraulic principles, laws, components, and symbols. Topics include: safety; the use of tools; and procedures in the design, building, testing, troubleshooting, and repair of industrial hydraulic systems. Includes demonstrations and extensive laboratory activities.

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
62

Total Student Contact Hours:
62

Course Fee
40

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. History of Fluid Power.
2. Basic Relationships of Fluid Power.
3. Fluid Power Circuits/systems.
4. Actuators – Characteristics, Appplications, and Nomenclature.
5. Common Failures of Actuators.
6. Hydraulic Fluid – Properties, Laws, and Characteristics.
7. Viscosity.
8. Viscosity Index.
9. Pour Point.
10. Common Failures of Fluid.
11. Fluid Conditioning and Contamination Control.
12. Filtration/Strainer Considerations.
13. Fluid Distribution.
14. Rigid, Semi-rigid, and Flexible Conductors.
15. Connector Characteristics and Considerations.
16. Mounting Considerations.
17. Common Failures of Conductors.
18. Pascal's Law.
19. Bernoulli's Law.
20. Force/Pressure/Area/Velocity relationships to hydraulic systems.
21. Hydraulic Pumps – Construction, Application, Nomenclature, and Common Failures.
22. Principles and Theories of Hydraulic Pumps.
23. Pump Displacement, Delivery, and RPM.
24. Common Failures of Pumps.
25. Control and Safety Ciderations of Hydraulic Systems.
26. Flow Control.
27. Speed Control.
28. Pressure Control.
29. Valves - Nomenclature, Applications, and Construction.
30. Common Troubles of Hydraulic Systems.
31. Component Symbols.
32. Circuit Diagrams.
33. Preventative Maintenance Recommendations.

Describe the history of hydraulics.

Analyze the elements of a hydraulic circuits.

Define Force, Pressure and Area, and explain the relationships of each.

Explain Pascal's and Bernoulli's Laws, and how they affect the hydraulic system.

Analyze various actuators used in hydraulics and identify their characteristics.

Trouble-shoot various actuators by dismantling and identifying the various components.

Describe the characteristics of fluid as it relates to hydraulics.

Contrast various fluids and their characteristics.

Describe the conductors used in the hydraulic industry and explain the related nomenclature.

Explain various types of pumps used in hydraulics and their characteristics.

Identify the contamination and contamination control requirements involved in a hydraulic system.

Determine and analyze force, pressure, area, and velocity within a hydraulic circuit.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement

1. Unit and chapter tests given throughout the semester.
2. Analytical laboratory activities and performance exercises in which students demonstrate an understanding of assigned components and/or systems.
3. Technical documentation of data and results obtained from the hands-on activities.
4. Final exam in which common questions are asked covering the units and topics presented throughout the semester.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for ELEC 120

ELEC145 - AC/DC Rotating Machinery

Overview

Subject
Electrical Engineering Technol

Academic Department
Adv Manufacturing/Fabrication

School
Business, Entrepreneurshp, PD

Course Description
Focuses on theory and application of D.C. motors and generators, A.C. alternators, and single-phase and three-phase induction motors. Also covers single-phase and three-phase transformers. Includes laboratory activities with verification of several circuit principles. Extensive laboratory activities.

Course Pre-requisite(s)
ELEC103 Basic Electricity or Instructor permission.

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
62

Total Student Contact Hours:
62

Course Fee
50

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Introduction to D.C. motors and D.C. generators. Includes lab.
2. Lab demonstration of types of D.C. generators
3. Fundamentals of the D.C. generator. Includes lab.
4. Generator characteristics. Includes lab.
5. Load characteristics of a shunt and compound D.C. generator. Includes lab.
6. Effect of speed on shunt generators. Includes lab.
7. Load characteristics of a self-excited shunt and compound generator. Includes lab.
8. Counter E.M.F. of a D.C. motor. Motor torque and horsepower. Includes lab.
9. Fundamental motor equation.
10. D.C. motor characteristics and loading effects. Includes lab.
11. D.C. shunt motor and series motor loading conditions. Includes lab.
12. Introduction to single-phase transformers. Includes lab.
13. Coil polarities and transformer ratios. Includes lab.
14. Single-phase transformer relationships. Includes lab.
15. Transformer open- and short-circuit tests, single-phase transformer efficiency. Includes lab.
16. Three-phase transformers. Includes lab.
17. Delta & Wye configurations. Includes labs.
18. Transformer three-phase – open Delta connection. Includes lab.
19. Three-phase transformer loads. Includes lab.
20. Power factor correction.
21. Three-phase transformer problems.
22. Three-phase (poly-phase) induction motor – squirrel cage. Includes lab.
23. Three-phase induction motor characteristics and performance. Includes lab.
24. Load characteristics of the squirrel cage induction motor. Includes lab
25. Starting and running characteristics of a squirrel cage induction motor. Includes lab.
26. Running characteristics of the three-phase squirrel cage motor (no-load condition, locked rotor test, loaded condition). Includes lab.
27. Determining starting torque using locked rotor method of squirrel cage motor. Includes lab.
28. Starting characteristics of the squirrel cage induction motor. Includes lab.
29. Three-phase motors and circuit conditions. Includes lab.

Practice safety precautions and procedures when wiring and operating D.C. and A.C. rotating machines and induction type devices.

Identify the components of a D.C. motor and a D.C. generator as it relates to their physical construction.

Analyze, define, and understand the various common D.C. motor circuits and wiring configurations.

Analyze, understand, and explain the principles of operation of a D.C. motor.

Analyze the various common D.C. generator circuits and wiring configurations.

Analyze the principles of operation of a D.C. generator.

Analyze the loading effects on both D.C. motors and D.C. generators.

Analyze the principles of a single-phase transformer for both step-up and step-down applications.

Explain the construction and principles of operation of both a DELTA and a WYE three-phase transformer.

Understand the construction and operation of a three-phase squirrel cage induction type motor.

Analyze connections of DC and AC motors to determine operation and functionality.

Analyze connections of single phase and three-phase transformers to determine operation and functionality.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement

1. Unit and chapter tests given throughout the semester. Tests represent 50 percent of the course grade.
2. Informal and Formal laboratory activities and performance exercises in which students demonstrate an understanding of assigned circuits. Formal laboratory activities are submitted as a written report and represents 25 percent of the course grade.
3. Final exam in which common questions are asked covering the units and topics presented throughout the semester. The final exam is worth 25 percent of the course grade.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for ELEC 145

ELEC161 - Fluid/Pneumatic Power Systems Certificat

Overview

Subject
Electrical Engineering Technol

Academic Department
Adv Manufacturing/Fabrication

School
Business, Entrepreneurshp, PD

Course Description
This class will allow a student to acquire a credential in both hydraulics and pneumatics. Explores the principles of basic hydraulic principles and fluid power pneumatics as they apply to industrial systems. Examines various pneumatic/hydraulic components with respect to their functions within pneumatic/hydraulic power and control systems. This includes laws, components, and symbols. Topics include: safety; the use of tools; and procedures in the design, building, testing, troubleshooting, and repair of industrial pneumatic/hydraulic systems. Includes demonstrations and extensive laboratory activities.

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
62

Total Student Contact Hours:
62

Course Fee
50

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Safety - Hydraulics and Pneumatics
2. History of Fluid Power
3. Basic Relationships of Fluid Power
4. Fluid Power Circuits/Systems
5. Actuators - Characteristics, Applications and Nomenclature
6. Viscosity and Viscosity Index
7. Compression Processes
8. Common Failures of Systems and Components
9. General Gas Law Calculations
10. Relationship of Force, Pressure and Area
11. Compressors and Pumps
12. Conductors and Fluid Distribution
13. Receivers, Reservoirs, Filtration, Regulation and Lubrication
14. Pressure, Direction, Speed and Flow Control
15. Preventative Maintenace on Systems
16. Power and Control Systems
17. Component Symbols and Circuit Diagrams
18. Circuit Design: Techniques
19. Circuit Design: Fabrication
20. Circuit Design: Circuit Assembly
21. Circuit Design: Troubleshooting
22. Extensive Laboratory Experiments

Demonstrate awareness of safety considerations when dealing with pneumatic and hydraulic equipment in the lab and on the job.

Describe the history of hydraulics and pneumatics.

Predict the behavior of a gas given changes in temperature and volume.

Calculate force, pressure, area and identify their relationship.

Analyze various actuators used in hydraulics/pneumatics and identify their characteristics.

Describe the characteristics of fluid as it relates to hydraulics.

Describe the characteristics of atmospheric air and the compression process.

Contrast various fluids and their characteristics.

Describe the conductors used in the hydraulic/pneumatic industry and explain the related nomenclature.

Explain various types of pumps used in hydraulics and their characteristics.

Explain the various types of compressors in pneumatics and their characteristics.

Identify the contamination and contamination control requirements involved in a hydraulic/pneumatic system.

Apply simple gas laws with respect to gases under load and flow conditions.

Describe the functions of receivers, filters, regulators, and lubricators as components of a fluid power system.

Describe power and control air.

Analyze various valve types, styles, and internal components to their function within a hydraulic/pneumatic system.

Demonstrate the use of Pneumatic pilots (controls) to initiate circuit action.

Describe the operation/function of signals used in control systems.

Assemble various power and control circuit configurations from a control ladder diagram to demonstrate their functionality.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement

1. Unit and chapter tests given throughout the semester.
2. Analytical laboratory activities and performance exercises in which students demonstrate an understanding of assigned components and/or systems.
3. Technical documentation of data and results obtained from the hands-on activities.
4. Final exam in which common questions are asked covering the units and topics presented throughout the semester.
5. NC3 Certification tests in both Hydraulics and Pneumatics.

Grading Scale

- 90-100: A
- 80-89: B
- 70-79: C
- 60-69: D
- Below 60: E

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for ELEC 161

ELEC185 - Pneumatics

Overview

Subject
Electrical Engineering Technol

Academic Department
Adv Manufacturing/Fabrication

School
Business, Entrepreneurshp, PD

Course Description
Explores the principles of fluid power pneumatics as they apply to industrial systems. Examines various pneumatic components with respect to their functions within pneumatic power and control systems. Includes extensive laboratory activities.

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
62

Total Student Contact Hours:
62

Course Fee
40

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Safety.
2. Procedures review from applied tech/FP systems.
3. Fluid power pneumatics – cylinders (output devices).
4. Basic gas laws.
5. Compressors (input devices).
6. Distribution systems.
7. Receivers, filtration, regulation, and lubrication.
8. Power systems.
9. Controls systems.
10. Controls (signals).
11. Circuit design: techniques.
12. Circuit design: fabrication.
13. Circuit design: assembly using a diagram.
14. Circuit design: troubleshooting.

Demonstrate awareness of safety considerations when dealing with pneumatic equipment in the lab and on the job.

Predict the behavior of a gas given changes in temperature and volume.

Understand common pneumatic terminology, symbology, and the application of both.

Match various cylinder types and styles to their function in a fluid power system.

Apply simple gas laws with respect to gases under load and flow conditions.

Describe the functions of receivers, filters, regulators, and lubricators as components of a fluid power system.

Describe power and control air.

Match various compressor types, styles, and components to their function within the pneumatic system.

Analyze various valve types, styles, and internal components to their function within a pneumatic system.

Demonstrate the use of Pneumatic pilots (controls) to initiate circuit action.

Describe the operation/function of signals used in control systems.

Assemble various power and control circuit configurations from a control ladder diagram to demonstrate their functionality.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement

1. Unit and chapter tests given throughout the semester. Tests represent 50 percent of the course grade.
2. Informal and formal laboratory activities and performance exercises in which students demonstrate an understanding of assigned circuit systems. Formal laboratory activities are submitted as a written report and represents 25 percent of the course grade.
3. Final exam in which common questions are asked covering the units and topics presented throughout the semester. The final exam is worth 25 percent of the course grade.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for ELEC 185

ELEC195 - AC/DC Circuit Analysis

Overview

Subject
Electrical Engineering Technol

Academic Department
Adv Manufacturing/Fabrication

School
Business, Entrepreneurshp, PD

Course Description
Focuses on D.C. single- and multi-source circuitry with the application of loop, node, and Thevenin's theorem. Also covers A.C. reactive circuits using both phasors and complex numbers for determining reactance, impedance, and power factor. Laboratory activities.

Course Pre-requisite(s)
ELEC103 Basic Electricity or Instructor permission.

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
62

Total Student Contact Hours:
62

Course Fee
40

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
Minimum Departmental Exam Score

80% written exam 95% lab exam

Departmental Exam Details

The credit for prior learning exam includes a written portion and a lab portion.

Goals, Topics, and Objectives

Core Course Topics

1. D.C. circuit conditions – single-power supply application.
2. Single-power supply application – series, parallel, and combination networks.
3. Basic elements of phasors.
4. Apparent power, power factor, and real power.
5. Complex numbers – real and imaginary (j-operator).
6. Rectangular to polar – polar to rectangular conversions.
7. Inductive reactance – circuit conditions; voltage and current phase shift.
8. A.C. circuits – inductance.
9. Vector analysis – series R-L circuit conditions.
10. Solving Series R-L circuits by complex numbers – rectangular and polar forms.
11. Frequency response of the R-L circuit configuration.
12. Solving parallel circuits by complex numbers – rectangular and polar forms.
13. Capacitive reactance – circuit conditions; voltage and current phase shift.
14. Series R-C circuits.
15. Vector analysis – series R-C circuit conditions.
16. Frequency response of the R-C circuit configuration.
17. Vector analysis – parallel R-C circuit conditions.
18. Frequency response of the R-L circuit configurations.
19. Series and parallel impedance in A.C. circuits.
20. Series RLC circuits.
21. Parallel RLC circuits.
22. Series resonant circuit conditions.
23. Parallel resonant circuit conditions.
24. Power factor correction.
25. Thevenin's theorem.
26. Superposition method of analysis.
27. Loop-mesh circuit analysis.
28. Nodal circuit analysis.

Solve D.C. single source series, parallel and combination circuitry.

Solve A.C. single source series, and parallel circuitry involving resistive, inductive, and capacitive components.

Analyze A.C. reactive circuit conditions, to calculate for impedance values, and to determine phase relationships using phasors (vectors).

Demonstrate an understanding of complex numbers (j-operator) as it would apply to A.C. reactive circuit analysis.

Solve A.C. reactive circuit conditions using both polar and rectangular forms of analysis.

Determine the real, reactive, and apparent power values for A.C. circuit conditions.

Demonstrate an understanding of the resulting effects of the power factor and when necessary correct the power factor condition for optimum circuit efficiency.

Solve D.C. multi-source circuits using Thevenin's theorem and to simplify the circuitry to the Thevenin's equivalent network.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement

- Unit and chapter tests given throughout the semester. Tests represent 50 percent of the course grade.
- Informal and Formal laboratory activities and performance exercises in which students demonstrate an understanding of assigned circuits. Formal laboratory activities are submitted as a written report and represents 25 percent of the course grade.
- Final exam in which common questions are asked covering the units and topics presented throughout the semester. The final exam is worth 25 percent of the course grade.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for ELEC 195

ELEC200 - Ladder Diagrams & Motor Controls

Overview

Subject
Electrical Engineering Technol

Academic Department
Adv Manufacturing/Fabrication

School
Business, Entrepreneurshp, PD

Course Description
Covers the fundamentals of electrical ladder diagrams and motor control circuits. Presents ladder logic, as well as labels, documentation, and symbology of electrical drawing with the use of ladder diagrams for troubleshooting. Also discusses control circuits for three-phase motors and sequential control of electro-pneumatic devices. Several single-phase control circuits are included in laboratory exercises. Also included in the lab exercises are sequencing electro-pneumatic devices. Introduces students to the variable frequency drive to control three phase motor speed. Students connect more than 40 circuits in the lab.

Course Pre-requisite(s)
ELEC103 Basic Electricity or Instructor permission.

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
62

Total Student Contact Hours:
62

Course Fee
40

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Electrical tools, instruments, and safety.
2. Electrical symbols and line diagrams.
3. Ladder logic and line diagrams.
4. A.C. manual contractors and motor starters.
5. Magnetism and magnetic solenoids.
6. A.C. and D.C. contactors and magnetic motor starters.
7. Forward and reversing starters.
8. Time delay devices.
9. Complex line diagrams and control devices.
10. Plugging and anti-plugging.
11. A.C. reduced voltage starters.
12. Solid state electronic controls.
13. Multi-speed motor controls.
14. Single-phase starters and reversing circuits.
15. Single phase multi-speed circuits.
16. Sequencing of electro-pneumatic devices.
17. Introduction to the variable frequency drive.
18. Demonstrate the ability to connect over 40 complex circuits in the lab.

Demonstrate the proper use of electrical tools, instruments, and electrical safety procedures.

Read and draw electrical ladder diagrams and recognize all electrical symbols.

Apply use of electrical ladder diagrams to troubleshoot circuits.

Demonstrate an understanding of and apply the concepts of motor starters and physically wire a manual motor starter circuit.

Demonstrate knowledge of magnetic contactors and solenoids and wire them into electrical control circuits.

Demonstrate an understanding of the operation of a magnetic motor starter circuit and successfully wire a magnetic starter.

Demonstrate an understanding of the following concepts utilized in three phase A.C. motor control circuits and be able to implement them in the lab: forward and reverse starting, plugging and anti-plugging, multi-speed operation, and braking circuits.

Demonstrate an understanding of the concept of reduced voltage starters.

Compare three phase motor control circuits to single phase motor control circuits and be able to wire single phase motor control circuits.

Demonstrate knowledge of electrical timers and apply them in electrical control circuits.

Demonstrate application of industrial electronic control circuits.

Demonstrate knowledge of electropneumatic directional control valve.

Demonstrate knowledge and wiring of ladder diagrams that control the sequencing of cylinders for machine controls.

Demonstrate knowledge of variable frequency drives to control motor speed.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement

1. Tests given throughout the semester. Tests represent 50 percent of the course grade.
2. Informal and Formal laboratory activities and performance exercises in which students demonstrate an understanding of assigned circuits. Formal laboratory activities are submitted as a written report and represents 50 percent of the course grade.
3. Connection of over 40 complex circuits must be made operational by students.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for ELEC 200

ELEC235 - Siemens PLC/HMI Programming

Overview

Subject
Electrical Engineering Technol

Academic Department
Adv Manufacturing/Fabrication

School
Business, Entrepreneurshp, PD

Course Description
A discussion of the Siemens PLC hardware and the Siemens HMI device is given. Step by step programming instructions are then explained to use the Siemens hardware and Siemens HMI device as a system. The student builds on the information discussed and learns both programming skills as well as troubleshooting skills through both lecture and lab situations. An extensive hands-on approach to programming and troubleshooting of the Siemens PLC/HMI system.

Course Pre-requisite(s)
ELEC200 Lad Diag & Mot Cntl or Instructor permission.

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
62

Total Student Contact Hours:
62

Course Fee
50

Academic Level
Undergraduate

Goals, Topics, and Objectives

Course Goals
To prepare the student to be able to interpret a Siemens PLC/HMI PLC system in a minimum amount of time. Analyze Siemens PLC/HMI programs and troubleshoot.

Core Course Topics
1. Hardware and software introduction.
2. The Scan Cycle.
3. STOP, STARTUP, and RUN mode.
4. Data Types.
5. Project or Portal View.
6. Downloading/Uploading programs.
7. Input and Output Addresses.
8. Methods of Adding an HMI Panel.
9. HMI and PLC Tags.
10. Design PLC programs from scratch.
11. Design HMI Screens from scratch.
12. Timers.
13. Counters.
14. Latches.
15. Math Statements.
16. HMI Functions.

Demonstrate proficiency in entry-level PLC programming.

Design a Siemens PLC program to solve various control problems.

Construct a useable HMI interface to allow a user the ability to operate various parameters.

Evaluate a Siemens program and determine how it operates.

Troubleshoot a non-functioning Siemens PLC program.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
1. Section tests.
2. Software program writing.
3. Additional assessment of student achievement may include assignments, quizzes, and exams.
4. A written final exam.
5. A programming final exam.
6. A final PLC/HMI project.
7. Final project.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for ELEC 235

ELEC245 - Programmable Controllers

Overview

Subject
Electrical Engineering Technol

Academic Department
Adv Manufacturing/Fabrication

School
Business, Entrepreneurshp, PD

Course Description
Begins with a thorough discussion of the Allen Bradley Contrologix/Compactlogix programmable controller system characteristics, followed by a detailed presentation on how to use the programmable controller to solve the automated control problem.

Course Pre-requisite(s)
ELEC115 Digital Circuits 1 and ELEC200 Lad Diag & Mot Cntl or Instructor permission.

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
62

Total Student Contact Hours:
62

Course Fee
50

Academic Level
Undergraduate

Goals, Topics, and Objectives

Course Goals
To prepare the student to be able to adapt to any PLC system, regardless of the manufacturer, in a minimum amount of time.

Core Course Topics
1. Hardware and software introduction
2. RSLinx EtherNet/IP drivers
3. Power components
4. Internal relays, timers, and counters
5. Creating and monitoring RSLogix 5000 tags
6. Tag aliasing
7. Uploading, downloading and going online with the Logix controller
8. Creating and debugging logic within the ladder editor
9. RSLogix 5000 project organization

Understand the applications of a Programmable Logic Controller (PLC) and how it is part of an automation system.

Demonstrate proficiency in entry-level PLC programming.

Demonstrate proficiency in interfacing a PLC to basic electrical equipment.

Demonstrate proficiency in entering and executing a PLC program from a computer terminal.

Prepare and organize a machine control package used to emphasize the importance of graphical communication.

Demonstrate the ability to solve a control problem utilizing the logical capability of the PLC.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
1. Tests given throughout the semester. Tests represent 40 percent of the course grade.
2. Informal and Formal laboratory activities and performance exercises in which students demonstrate an understanding of assigned circuits. Formal laboratory activities are submitted as a written report and represents 60 percent of the course grade.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for ELEC 245

ELEC255 - Instrumentation Systems

Overview

Subject
Electrical Engineering Technol

Academic Department
Adv Manufacturing/Fabrication

School
Business, Entrepreneurshp, PD

Course Description
Introduces instrumentation systems in a laboratory setting. Covers transducers including linear variable differential transformers (LVDTS), strain gages, accelerometers, load cells, magnetic pickups, and temperature detectors. Utilizes computer-based data acquisition including LabVIEW® graphical programming language.

Course Pre-requisite(s)
ELEC106 Basic Electronics

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
62

Total Student Contact Hours:
62

Course Fee
40

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Computer-based data acquisition.
2. Resistance potentiometer displacement measurements.
3. Position transducers.
4. Bridge-type position transducers.
5. AC-AC type linear variable differential transformer (LVDT).
6. Computer-based measurement of time variant displacement.
7. DC linear variable differential transformer (DC LVDT).
8. LabVIEW@ programming.
9. The rotary variable differential transformer (RVDT).
10. Strain Gage Installation.
11. Strain Gage Soldering.
12. Strain Gage Calibration.
13. Vibration physics.
14. Acceleration: the link with dynamics.
15. Strain gage accelerometers.
16. High impedance piezoelectric accelerometers.
17. Low impedance piezoelectric accelerometers.
18. Thermocouple experiment.

Analyze the operating principles of transducers including poteniometric transducers, Wheatstone Bridge, linear variable differential transformer (LVDT) transducers, strain gages, piezoelectric accelerometers, low impedance accelerometers, thermocouples and semiconductor temperature detectors.
Explain the concepts of measurement.
Demonstrate the concept of repeatability.
Analyze the linearity of a measurement system.
Construct a graph to show hysteresis of a measurement system.
Locate the sensitivity information related to sensors.
Explain the resolution of an instrumentation system.
Assess the mechanical resonance of a vibrating mechanical system.
Design a virtual instrument with LabView.
Analyze graphical data and interpret the results.
Collect data from sensors and formulate graphs.
Explain the operation of each type of sensor studied.
Write a report based on lab results.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Note: Assessment of the achievement is demonstrated by students passing a final exam in which common questions related to the competencies are given. In addition, students will demonstrate achievement of the competencies through the various methods as listed below. 1. Conduct laboratory activities of various instrumentation systems using LabVIEW® where the acquisition of data is used to analyze the operating principles and characteristics of transducers including potentiometric transducers, Wheatstone Bridge, linear variable differential transformer (LVDT) transducers, strain gages, piezoelectric accelerometers, low impedance accelerometers, thermocouples, and semiconductor temperature detectors. 2. Conduct laboratory exercises and activities where measurement concepts are explored, identified, and observed to include repeatability, linearity, hysteresis, sensitivity, resolution, and mechanical resonance.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for ELEC 255

ELEC260 - Automation Controls and Robotics

Overview

Subject
Electrical Engineering Technol

Academic Department
Adv Manufacturing/Fabrication

School
Business, Entrepreneurshp, PD

Course Description
Utilizes control specifications written by the student for laboratory automation machines and industrial robots to implement controls for non-synchronous and synchronous operation of the machine. Covers techniques, terminology, and documentation currently used in automated manufacturing.

Course Pre-requisite(s)
ELEC235 Siemens PLC/HMI Programming or ELEC245 Programmable Controllers or Instructor permission.

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
62

Total Student Contact Hours:
62

Course Fee
40

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics
1. Programming a machine using sequencer commands.
2. Power up and jog the robot.
3. Programming a touch screen panel to replace hard-wired pushbuttons.
4. Programming a robot and have an understanding of the program header information
5. Programming in RSLogix 5000 to control machine cycles.
6. Recover the Fanuc robot from common faults
7. Write a Fanuc robot program and teach positions to achieve the required tasks.
8. Know how to safely test a Fanuc robot programusing single step and continous testing
9. Develop and use position and data registers for the Fanuc robot
10. Teach a new Tool Center Point (TCP) for the Fanuc robot
11. Develop a pick and place program for the Fanuc robot
12. Manipulate Fanuc robot program files
13. Understand and use the different motion types and frames
14. Create Fanuc programs using circular interpolation
15. Copy, paste and edit programs
16. Remaster the Fanuc robot
17. Develop Fanuc robo programs that use branching, calling, LBL, JMP LBL, equal, less than or equal, greater than or equal, etc
18. Develop programs the utilize the inputs/outputs on the Fanuc robot
19. Create and assign macros on the Fanuc robot
20. Establish Ethernet communication with the Compactlogix Programmable Automation Controllers (PAC)
21. Develop PAC programs in RSLogix 5000 that interface to the Fanuc robot (Industrial Networking) and also utilize the Siemens touchscreen
22. Develop programs that utilize produced-consumed tags on the Allen-Bradley Compactlogix PAC
23. Understand the various sensors and the machine cycle on the FMS 200 (Flexible Manufacturing Systems)
24. Troubleshoot faults on the FMS 200

Interfacing the PLC to a wide variety of industrial equipment.
Demonstrate a proficiency in an advanced level of PLC programming.
Programming shift registers to track moving parts on a rotary indexing table and a lift and transfer machine.
Writing programs that use RSLogix 5000 software to control a variety of machine processes.
Demonstrate proficiency in trouble shooting programs while the machine is in the test/run mode
Perform touch screen panel (PanelView) programming.
Perform basic robot programming.
Troubleshoot working progams in Contrologix/Compactlogix.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
1. Informal and formal laboratory activities and performance exercises in which students demonstrate an understanding of assigned circuits. Formal laboratory activities are submitted as a written report and represent 80 percent of the course grade.
2. Final laboratory project. The final project is worth 20 percent of the course grade.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for ELEC 260

ELEC265 - Basic Troubleshooting 101

Overview

Subject
Electrical Engineering Technol

Academic Department
Adv Manufacturing/Fabrication

School
Business, Entrepreneurshp, PD

Course Description
Introduces the fundamentals of troubleshooting including analog and digital circuits. Topics include printed circuit board repair, power supply repairs and troubleshooting, transducers repair and troubleshooting, amplifier repair and troubleshooting, silicon controlled rectifiers (SCR's) repair and troubleshooting. The class will also include various digital electronic circuit repair and troubleshooting. Circuits are constructed by students with faults so troubleshooting and testing can be employed to find and repair the faulty circuits.

Course Pre-requisite(s)
ELEC103 Basic Electricity, ELEC115 Digital Circuits 1, ELEC145 AC/DC Rotating Machinery and ELEC200 Lad Diag & Mot Cntl or instructor permission

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
62

Total Student Contact Hours:
62

Course Fee
60

Academic Level
Undergraduate

Goals, Topics, and Objectives

Course Goals
This class is to prepare the student to be able to understand and troubleshoot basic electrical/electronic components and circuits.

Core Course Topics
1. Fundamentals of troubleshooting.
2. Troubleshooting with a meter.
3. Troubleshooting with an oscilloscope.
4. Troubleshooting board level components.
5. Circuit board foil repair.
6. Power supply repair topics.
7. Repairing transducers.
8. Troubleshooting an amplifier.
9. Other circuit repairs.

Analyze a circuit's operating characteristics based on a diagram.
Troubleshoot electrical problems using meters, oscilloscopes, signal generators and frequency counters.
Evaluate problems with various electrical devices.
Evaluate and create solutions to problems on circuit boards, including foil repair.
Troubleshoot and create solutions to problems related to power supplies, transducers, amplifiers and other circuits and equipment.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
- Section tests
- Software program writing
- Additional assessment of student achievement may include assignments, quizzes, and exams
- Final exam
- Final project

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for ELEC 265

ELEC270 - Instrumentation II LabVIEW Programming

Overview

Subject
Electrical Engineering Technol

Academic Department
Adv Manufacturing/Fabrication

School
Business, Entrepreneurshp, PD

Course Description
Using the LabVIEW environment, students will develop virtual instrumentation. Various concepts related to using G Programming are discussed. This is a hands-on class. A Final Project is required.

Course Pre-requisite(s)
ELEC255 Instrumentation Systems Instrumentation or Instructor permission.

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
62

Total Student Contact Hours:
62

Academic Level
Undergraduate

Goals, Topics, and Objectives

Course Goals
This class is to prepare the student to be able to program using graphical programming language, also known as "G". LabView software will be used to create practical applications that will acquire, process, display, and store real-world data. Students will learn various concepts needed to create virtual instruments. These virtual instruments will be used in the development of these practical applications.

Core Course Topics

1. Hardware and software introduction.
2. Sample rate. Aliasing inaccuracy. Quantization error.
3. Creating Virtual Instrument Hierarchy. Controls. Indicators. Constants. Terminals.
4. Navigating in LabView. Use of the block diagram.
5. Data Types, Arrays and Clusters.
6. Sub Virtual Instruments.
7. Case Structure. Loops.
8. Charts and Graphs. Sequences.

Analyze a circuit's operating characteristics based on a diagram.

Troubleshoot electrical problems using meters, oscilloscopes, signal generators and frequency counters.

Evaluate problems with various electrical devices.

Evaluate and create solutions to problems on circuit boards, including foil repair.

Troubleshoot and create solutions to problems related to power supplies, transducers, amplifiers and other circuits and equipment.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement

- Section Tests
- Software program writing
- Additional assessment of student achievement may include assignments, quizzes, and exams
- Final exam
- Final project

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for ELEC 270

ELEC276 - Elec Sys Analysis, Design & Troubleshoot

Overview

Subject
Electrical Engineering Technol

Academic Department
Adv Manufacturing/Fabrication

School
Business, Entrepreneurshp, PD

Course Description
The purpose of this course is to design, analyze, develop and acquire advanced electrical troubleshooting skills. In this course, students will analyze and develop microprocessors, signal processing, analog and digital sensors systems, programmable logic controllers (PLCs) and human machine interface (PLC/HMI) systems as well as, the communication used between systems and more as part of the student's development in the field of electrical technology. Troubleshooting skills will also be addressed for these systems. Extensive lab development including analysis, design and troubleshooting of complete systems. A final project is required. This course will deepen the understanding of knowledge acquired in other Electrical Engineering Technology courses especially ELEC-145, ELEC-185, ELEC-200, ELEC-235, ELEC-245, ELEC-255 and ELEC-270. The course will also explore more advanced topics as part of real-world learning relevance.

Course Pre-requisite(s)
ELEC145 AC/DC Rotating Machinery, ELEC185 Pneumatics, ELEC200 Lad Diag & Mot Cntl, ELEC235 Siemens PLC/HMI Programming, ELEC245 Programmable Controllers, ELEC255 Instrumentation Systems and ELEC270 Instrumentation II LabVIEW Pr or instructor permission

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
62

Total Student Contact Hours:
62

Course Fee
60

Academic Level
Undergraduate

Goals, Topics, and Objectives

Course Goals
This class is to prepare the student to be able to analyze, design and troubleshoot complete electrical/electronic systems.

Core Course Topics

1. Analyze programmable logic controller (PLC) hardware and Human Machine Interface (HMI) software.
2. Analyze PLC/HMI systems.
3. Analyze multiple types of sensors.
4. Analyze data from multiple types of sensors.
5. Analyze and troubleshoot programmable logic controller (PLC) communications.

Demonstrate proficiency in electrical systems analysis, design and troubleshooting.

Upon successful completion of this program, students should be able to:1. Demonstrate proficiency in electrical systems analysis, design and troubleshooting.2. Formulate maintenance plans for electrical systems.

Evaluate and determine how a system operates

Evaluate and troubleshoot a non-functioning electrical system.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement

- Section tests.
- Software program writing.
- Additional assessment of student achievement may include assignments, quizzes, and exams.
- Final exam.
- Final project.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for ELEC 276

ELEC290 - Co-op in Electrical Technology

Overview

Subject
Electrical Engineering Technol

Academic Department
Adv Manufacturing/Fabrication

School
Business, Entrepreneurshp, PD

Course Description
Cooperative education is a structured method of combining classroom-based education with practical work experience. A cooperative education experience, commonly known as a "co-op," provides academic credit for structured employment experience. Work experience must be directly related to the student's declared major to be eligible.To register for this course, a student must have completed 50% of core coursework, maintain an overall GPA of 2.0 and a program specific GPA of 2.5.

Course Pre-requisite(s)
Permission from Career Services Officer or Job Developer in the Office of Career Services

Credit Hours
2

Total Contact Hours

Total Instructor Contact Hours:
3

Total Student Contact Hours:
150

Academic Level
Undergraduate

Goals, Topics, and Objectives

Course Goals
Cooperative education helps students make the school-to-work transition, develop career and program-related learning objectives, and work on applicable skills for employment. Placements should provide students with the opportunity to apply and expand upon knowledge learned in the classroom, and develop the skills acquired in their coursework to align with the standards and expectations set by the worksite.
Core Course Topics

1. Core Career-Focused Topics:
    - Professional Dress and Demeanor (attitude, posture, courteousness)
    - Workplace Communication
    - Interviewing Skills
    - Resume Building
    - Networking and Social Media
    - Seeking Employment
    - Career Advancement

1-3 program specific learning objectives will be developed by the instructor for each individual offering.

Students will create 1-3 learning objectives per credit to be approved by instructor for each individual offering.

Build a resume that meets standards of Career Services Officer.

Articulate the reasons for professional attire.

Wear professional attire while on the work site.

Attend career workshop in professional dress.

Display appropriate professional attitude and demeanor while on the work site.

Interview effectively.

Attend mock interview, give appropriate answers to five 5 questions.

Complete a written job application in a prompt, professional manner with all information legible, error-free, and thorough.

Display understanding of the appropriate use of Social Media sites (Facebook, LinkedIn, and Twitter) during Career Services workshop.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment will be determined by the instructor based on what is in the best interest of the student's academic growth, including future employability of the student. Assessment may include, but isn't limited to:

- Major final project
- Weekly journal
- Creation and attainment of all learning objectives
- Participation in a career-focused workshop
- Consistent and prompt attendance at worksite
- Employer evaluation

General Course Requirements and Recommendations
To be determined by the instructor. Detailed course syllabi will be standardized for all co-op courses and individual course requirements will be available to the AEC and College Council by request "For information only" for each term that the course is offered.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for ELEC 290

ELEC297 - Spec Topics in Electrical Technology

Overview

Subject
Electrical Engineering Technol

Academic Department
Adv Manufacturing/Fabrication

School
Business, Entrepreneurshp, PD

Course Description
Explores selected topics as determined by the academic department and the instructor with emphasis on current electrical technology trends. Specific special topics and the prerequisites will be announced each term. Course may be repeated when different topics are offered, earning credit for each different topic.

Course Pre-requisite(s)
Instructor Permission

Credit Hours
1

Total Contact Hours

Total Instructor Contact Hours:
16

Total Student Contact Hours:
16

Academic Level
Undergraduate

Goals, Topics, and Objectives

Course Goals
To provide the instructional flexibility needed to address the specific needs of a targeted student population.
Core Course Topics
To be determined by the instructor.

To be determined by the instructor.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
All students will be required to complete a comprehensive final examination that assesses the learning of course objectives. This exam must be weighted in a manner so that this exam score is worth a minimum of fifteen percent of the final course grade. All additional assessment of student achievement is left to instructor discretion.

General Course Requirements and Recommendations
To be determined by the instructor. Detailed course syllabi for each section of ELEC297 Spec Topics in Electrical Tech must be approved by the Department prior to the course being offered.

Texts
To be determined by the instructor.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for ELEC 297

ELEC298 - Spec Topics in Electrical Technology

Overview

Subject
Electrical Engineering Technol

Academic Department
Adv Manufacturing/Fabrication

School
Business, Entrepreneurshp, PD

Course Description
Explores selected topics as determined by the academic department and the instructor with emphasis on current electrical technology trends. The specific special topics and the prerequisites will be announced each term. Course may be repeated when different topics are offered, earning credit for each different topic.

Course Pre-requisite(s)
Instructor Permission

Credit Hours
2

Total Contact Hours

Total Instructor Contact Hours:
32

Total Student Contact Hours:
32

Academic Level
Undergraduate

Goals, Topics, and Objectives

Course Goals
To provide the instructional flexibility needed to address the specific needs of a targeted student population. , basic_html
Core Course Topics
To be determined by the instructor.

To be developed by the instructor for each individual offering

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
All students will be required to complete a comprehensive final examination that assesses the learning of course objectives. This exam must be weighted in a manner so that this exam score is worth a minimum of fifteen percent of the final course grade. All additional assessment of student achievement is left to instructor discretion.

General Course Requirements and Recommendations
To be determined by the instructor. Detailed course syllabi for each section of ELEC298 Spec Topics in Electrical Tech must be approved by the Department prior to the course being offered.

Texts
To be determined by the instructor.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for ELEC 298

ELEC299 - Special Topics

Overview

Subject
Electrical Engineering Technol

Academic Department
Adv Manufacturing/Fabrication

School
Business, Entrepreneurshp, PD

Course Description
Explores selected topics as determined by the academic department and the instructor with emphasis on current electrical technology trends. The specific special topics and the prerequisites will be announced each term. Course may be repeated when different topics are offered, earning credit for each different topic.

Course Pre-requisite(s)
Instructor Permission

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
62

Total Student Contact Hours:
62

Course Fee
50

Academic Level
Undergraduate

Goals, Topics, and Objectives

Course Goals
To provide the instructional flexibility needed to address the specific needs of a targeted student population.

Core Course Topics

1. Academic interaction
2. Analytical skills
3. Collocations
4. Note-taking
5. Speaking skills
6. Pronunciation skills

Practice American college classroom norms such as taking turns, agreeing/disagreeing, asking questions, and participating in groups

Analyze speaker attitude

Use collocations to express ideas

Practice note-taking skills using pictures, guided notes, and diagrams

Understand and produce complete written and spoken sentences

Practice conversations using scripts

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
All students will be required to complete a comprehensive final examination that assesses the learning of course objectives. This exam must be weighted in a manner so that this exam score is worth a minimum of fifteen percent of the final course grade. All additional assessment of student achievement is left to instructor discretion.

General Course Requirements and Recommendations
To be determined by the instructor. Detailed course syllabi for each section of ELEC299 Special Topics must be approved by the Department prior to the course being offered.

Texts
To be determined by the instructor.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for ELEC 299

ELI101C - ELL Communication 1

Overview

Subject
English Language Institute

Academic Department
English Language Institute

School
Liberal Arts

Course Description
Introduces low-beginning-level college communication skills and interactions for non-native English speakers. Satisfactory completion qualifies students for ELI-102C. This course does not transfer nor count toward degree graduation requirements.

Course Pre-requisite(s)
A satisfactory score on the ELL placement test or ELI approval

Course Co-requisite(s)
None; however, ELI101R ELL Reading & Listening 1 and ELI101W ELL Writing & Grammar 1 are recommended

Credit Hours
2

Total Contact Hours

Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Academic Level
Undergraduate

Goals, Topics, and Objectives

Course Goals
ELI101C ELL Communication 1 is designed to help English Language Learners (ELL) acquire low-beginning-level college communication skills and strategies.

Core Course Topics

1. Academic interaction
2. Analytical skills
3. Collocations
4. Note-taking
5. Speaking skills
6. Pronunciation skills

Practice American college classroom norms such as taking turns, agreeing/disagreeing, asking questions, and participating in groups.

Analyze speaker attitude.

Use collocations to express ideas.

Practice note-taking skills using pictures, guided notes, and diagrams.

Understand and produce complete written and spoken sentences.

Practice conversations using scripts.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of academic achievement will be identified and implemented by the class instructor. Methods will include, but not be limited to, assignments, presentations, individual and/or group projects, and quizzes/tests.

General Course Requirements and Recommendations
In order to progress to the next level, students must:

1. Actively participate in at least 80% of all class sessions
2. Average 75% or higher on all assignments, presentations, projects, and quizzes/tests
3. Make a final presentation (worth 25% of the final class grade)

Texts
Contact the Faculty Chair for textbook information.

ELI101R - ELL Reading & Listening 1

Overview

Subject
English Language Institute

Academic Department
English Language Institute

School
Liberal Arts

Course Description
Introduces low-beginning-level college-preparatory reading and listening skills for non-native English speakers. Satisfactory completion of this course qualifies students for ELI-102R. This course does not transfer nor count toward degree graduation requirements.

Course Pre-requisite(s)
A satisfactory score on the ELL placement test or ELI approval

Course Co-requisite(s)
None; however, ELI101W ELL Writing & Grammar 1 and ELI101C ELL Communication 1 are recommended

Credit Hours
5

Total Contact Hours
Total Instructor Contact Hours:
94

Total Student Contact Hours:
94

Academic Level
Undergraduate

Goals, Topics, and Objectives

Course Goals
ELI101R ELL Reading & Listening 1 is designed to help English Language Learners (ELL) acquire low-beginning-level reading and listening skills in order to understand and communicate in English.

Core Course Topics
1. Pre-reading strategies
2. Reading comprehension
3. Vocabulary
4. Greetings, introductions, and farewells
5. Listening skills
6. American culture

Use pictures to set a purpose for reading.

Demonstrate understanding by answering short questions in text and speech.

Demonstrate increased vocabulary.

Use appropriate greetings, introductions, and farewells.

Understand and produce complete written and spoken sentences.

Identify aspects of American culture.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of academic achievement will be identified and implemented by the class instructor. Methods will include, but not be limited to, assignments, presentations, individual and/or group projects, quizzes, tests, and a final exam.

General Course Requirements and Recommendations
In order to progress to the next level, students must:

1. Actively participate in at least 80% of all class sessions
2. Average 75% or higher on all assignments, presentations, projects, quizzes, and tests
3. Take a final exam (worth 25% of the final class grade)

Texts
Contact the Faculty Chair for textbook information.

ELI101W - ELL Writing & Grammar 1

Overview

Subject
English Language Institute

Academic Department
English Language Institute

School
Liberal Arts

Course Description
Introduces low-beginning-level college-preparatory writing and grammar skills for non-native English speakers. Satisfactory completion qualifies students for ELI-102W. This course does not transfer nor count toward degree graduation requirements.

Course Pre-requisite(s)
A satisfactory score on the ELL placement test or ELI approval

Course Co-requisite(s)
None; however, ELI101R ELL Reading & Listening 1 and ELI101C ELL Communication 1 are recommended

Credit Hours
5

Total Contact Hours
Total Instructor Contact Hours:
94

Total Student Contact Hours:
94

Academic Level
Undergraduate

Goals, Topics, and Objectives

Course Goals
ELI101W ELL Writing & Grammar 1is designed to help English Language Learners (ELL) acquire low-beginning-level writing and grammar skills in order to communicate in English.

Core Course Topics
1. Simple sentences and questions
2. Capitalization and punctuation
3. Nouns
4. Articles
5. Pronouns
6. Verbs
7. Word order
8. Vocabulary
9. Writing Process
10. Audience awareness

Write simple sentences and questions.

Identify and begin to use correct punctuation and capitalization.

Practice changing singular nouns to plural.

Recognize and identify articles.

Replace nouns with pronouns.

Practice writing sentences using regular, select irregular, and modal verbs in the simple present and past tense.

Recognize and use correct subject/verb/object word order in sentences and questions.

Recall and use new words.

Write, draft and edit new sentences.

Show evidence of audience in different writing tasks.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of academic achievement will be identified and implemented by the class instructor. Methods will include, but not be limited to, assignments, quizzes, tests, and a final exam.

General Course Requirements and Recommendations
In order to progress to the next level, students must:

1. Actively participate in at least 80% of all class sessions
2. Average 75% or higher on all assignments, quizzes, and tests
3. Write at least two graded in-class handwritten writing assignments
4. Complete a final exam with an in-class handwritten writing assignment component (worth 25% of their final grade)

Texts
Contact the Faculty Chair for textbook information.

ELI102C - ELL Communication 2

Overview

Subject
English Language Institute

Academic Department
English Language Institute

School
Liberal Arts

Course Description
Teaches beginning-level college communication skills and interactions to non-native English speakers. Satisfactory completion qualifies students for ELI-103C. This course does not transfer nor count toward degree graduation requirements.

Course Pre-requisite(s)
A satisfactory score on the ELL placement test or successful completion of ELI101C ELL Communication 1 or ELI approval

Course Co-requisite(s)
None; however, ELI102R ELL Reading & Listening 2 and ELI102W ELL Writing & Grammar 2 are recommended

Credit Hours
2

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Academic Level
Undergraduate

Goals, Topics, and Objectives

Course Goals
ELI102C ELL Communication 2 is designed to help English Language Learners (ELL) acquire beginning-level college communication skills and strategies.

Core Course Topics
1. Academic interaction
2. Analytical skills
3. Collocations
4. Note-taking
5. Speaking skills
6. Pronunciation skills

Practice American college classroom norms such as taking turns, agreeing/disagreeing, asking for clarification, and participating in groups.

Analyze speaker attitude.

Use collocations to express ideas.

Practice note-taking skills using guided notes and charts.

Use academic and informal language in presentations and discussions.

Practice the use of intonation, prominence, and pausing to create meaning.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of academic achievement will be identified and implemented by the class instructor. Methods will include, but not be limited to, assignments, presentations, individual and/or group projects, and quizzes/tests.

General Course Requirements and Recommendations
In order to progress to the next level, students must:

1. Actively participate in at least 80% of all class sessions
2. Average 75% or higher on all assignments, presentations, projects, and quizzes/tests
3. Make a final presentation (worth 25% of the final class grade)

Texts
Contact the Faculty Chair for textbook information.

ELI102R - ELL Reading & Listening 2

Overview

Subject
English Language Institute

Academic Department
English Language Institute

School
Liberal Arts

Course Description
Teaches beginning-level college-preparatory reading and listening skills to non-native English speakers. Satisfactory completion of this course qualifies students for ELI-103R. This course does not transfer nor count toward degree graduation requirements.

Course Pre-requisite(s)
A satisfactory score on the ELL placement test or successful completion of ELI101R ELL Reading & Listening 1 or ELI approval

Course Co-requisite(s)
None; however, ELI102W ELL Writing & Grammar 2 and ELI102C ELL Communication 2 are recommended

Credit Hours
5

Total Contact Hours
Total Instructor Contact Hours:
94

Total Student Contact Hours:
94

Academic Level
Undergraduate

Goals, Topics, and Objectives

Course Goals
ELI102R ELL Reading & Listening 2 is designed to help English Language Learners (ELL) attain beginning-level reading and listening skills in order to understand more clearly and communicate more effectively in English.

Core Course Topics
1. Pre-reading strategies
2. Reading comprehension
3. Vocabulary and idioms
4. Academic and informal listening skills
5. American culture

Employ background knowledge to make connections between L1 and L2.

Identify main ideas and supporting details.

Demonstrate increased vocabulary and idiom knowledge.

Recognize and apply academic and informal language in presentations and discussions.

Identify aspects of American culture that differ from the native culture.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of academic achievement will be identified and implemented by the class instructor. Methods will include, but not be limited to, assignments, presentations, individual and/or group projects, quizzes, tests, and a final exam.

General Course Requirements and Recommendations
In order to progress to the next level, students must:

1. Actively participate in at least 80% of all class sessions
2. Average 75% or higher on all assignments, presentations, projects, quizzes, and tests
3. Take a final exam (worth 25% of the final class grade)

Texts
Contact the Faculty Chair for textbook information.

ELI102W - ELL Writing & Grammar 2

Overview

Subject
English Language Institute

Academic Department
English Language Institute

School
Liberal Arts

Course Description
Teaches beginning-level college-preparatory writing and grammar skills for non-native English speakers. Satisfactory completion qualifies students for ELI-103W. This course does not transfer nor count toward degree graduation requirements.

Course Pre-requisite(s)
A satisfactory score on the ELL placement test or successful completion of ELI101W ELL Writing & Grammar 1 or ELI approval

Course Co-requisite(s)
None; however, ELI102R ELL Reading & Listening 2 and ELI-102CELI102C ELL Communication 2 are recommended

Credit Hours
5

Total Contact Hours
Total Instructor Contact Hours:
94

Total Student Contact Hours:
94

Academic Level
Undergraduate

Goals, Topics, and Objectives

Course Goals
ELI102W ELL Writing & Grammar 2 is designed to help English Language Learners (ELL) acquire beginning-level writing and grammar skills in order to communicate more clearly and accurately in English.

Core Course Topics
1. Simple sentences and questions
2. Capitalization and punctuation
3. Nouns
4. Articles
5. Pronouns
6. Verbs
7. Prepositions
8. Adverbs
9. Vocabulary
10. Writing Process
11. Audience awareness

Formulate simple statements, imperatives, and questions.

Demonstrate appropriate use of capitalization and end punctuation.

Recognize and distinguish count and non-count nouns.

Distinguish between definite and indefinite articles.

Identify and use subject, object, and possessive pronouns.

Formulate sentences using regular and select irregular verbs in the simple past and present; present continuous, and simple future tenses.

Practice and write sentences using correct prepositions of place/time and prepositional phrases.

Demonstrate correct usage of adverbs of place, time, manner, and degree of frequency.

Write sentences using a variety of level-appropriate vocabulary.

Draft, revise, and proofread sentences.

Illustrate evidence of audience awareness.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of academic achievement will be identified and implemented by the class instructor. Methods will include, but not be limited to, assignments, quizzes, tests, and a final exam.

General Course Requirements and Recommendations
In order to progress to the next level, students must:

1. Actively participate in at least 80% of all class sessions
2. Average 75% or higher on all assignments, quizzes, and tests
3. Write at least two graded in-class handwritten writing assignments
4. Complete a final exam with an in-class handwritten writing assignment component (worth 25% of their final grade)

Texts
Contact the Faculty Chair for textbook information.

ELI103C - ELL Communication 3

Overview

Subject
English Language Institute

Academic Department
English Language Institute

School
Liberal Arts

Course Description
Develops high-beginning-level college communication skills and interactions of non-native English speakers. Satisfactory completion qualifies students for ELI-104C. This course does not transfer nor count toward degree graduation requirements.

Course Pre-requisite(s)
A satisfactory score on the ELL placement test or successful completion of ELI102C ELL Communication 2 or ELI approval

Course Co-requisite(s)
None; however, ELI103R ELL Reading & Listening 3 and ELI103W ELL Writing & Grammar 3 are recommended

Credit Hours
2

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Academic Level
Undergraduate

Goals, Topics, and Objectives

Course Goals
ELI103C ELL Communication 3 is designed to help English Language Learners (ELL) acquire high-beginning-level college communication skills and strategies.

Core Course Topics
1. Academic interaction
2. Analytical skills
3. Academic discourse markers and collocations
4. Note-taking
5. Speaking skills
6. Pronunciation skills

Demonstrate and practice American college classroom norms such as taking turns, agreeing/disagreeing, asking for clarification, and participating in groups.

Analyze and evaluate speaker attitude.

Use academic discourse markers and collocations to express ideas.

Practice note-taking skills using guided notes.

Prepare and participate in academic discussions and presentations.

Practice the use of intonation, prominence, and pausing to create meaning.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of academic achievement will be identified and implemented by the class instructor. Methods will include, but not be limited to, assignments, presentations, individual and/or group projects, and quizzes/tests.

General Course Requirements and Recommendations
In order to progress to the next level, students must:

1. Actively participate in at least 80% of all class sessions
2. Average 75% or higher on all assignments, presentations, projects, and quizzes/tests
3. Make a final presentation (worth 25% of the final class grade)

Texts
Contact the Faculty Chair for textbook information.

ELI103R - ELL Reading & Listening 3

Overview

Subject
English Language Institute

Academic Department
English Language Institute

School
Liberal Arts

Course Description
Develops high-beginning-level college communication skills and interactions of non-native English speakers. Satisfactory completion qualifies students for ELI-104C. This course does not transfer nor count toward degree graduation requirements.

Course Pre-requisite(s)
A satisfactory score on the ELL placement test or successful completion of ELI102R ELL Reading & Listening 2 or ELI approval

Course Co-requisite(s)
None; however, ELI103W ELL Writing & Grammar 3 and ELI103C ELL Communication 3 are recommended

Credit Hours
5

Total Contact Hours
Total Instructor Contact Hours:
94

Total Student Contact Hours:
94

Academic Level
Undergraduate

Goals, Topics, and Objectives

Course Goals
ELI103R ELL Reading & Listening 3is designed to help English Language Learners (ELL) attain high-beginning-level reading and listening skills in order to understand more clearly and communicate more effectively in English.

Core Course Topics
1. Reading comprehension strategies including connecting, questioning, visualizing and predicting
2. Main idea and supporting details
3. Vocabulary and idioms
4. Academic and informal listening skills
5. American culture

Practice connecting, questioning, visualizing and predicting to guide reading.

Interpret main ideas and supporting details.

Demonstrate increased vocabulary and idiom knowledge.

Prepare and participate in academic discussions and presentations.

Contrast American culture with native culture.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of academic achievement will be identified and implemented by the class instructor. Methods will include, but not be limited to, assignments, presentations, individual and/or group projects, quizzes, tests, and a final exam.

General Course Requirements and Recommendations
In order to progress to the next level, students must:

1. Actively participate in at least 80% of all class sessions
2. Average 75% or higher on all assignments, presentations, projects, quizzes, and tests
3. Take a final exam (worth 25% of the final class grade)

Texts
Contact the Faculty Chair for textbook information.

ELI103W - ELL Writing & Grammar 3

Overview

Subject
English Language Institute

Academic Department
English Language Institute

School
Liberal Arts

Course Description
Develops high-beginning-level college-preparatory writing and grammar skills for non-native English speakers. Satisfactory completion qualifies students for ELI-104W. This course does not transfer nor count toward degree graduation requirements.

Course Pre-requisite(s)
A satisfactory score on the ELL placement test or successful completion of ELI102W ELL Writing & Grammar 2 or ELI approval

Course Co-requisite(s)
None; however, ELI103R ELL Reading & Listening 3 and ELI103C ELL Communication 3 are recommended

Credit Hours
5

Total Contact Hours
Total Instructor Contact Hours:
94

Total Student Contact Hours:
94

Academic Level
Undergraduate

Goals, Topics, and Objectives

Course Goals
ELI103W ELL Writing & Grammar 3 is designed to help English Language Learners (ELL) acquire high-beginning-level writing and grammar skills in order to communicate more clearly and accurately in English.

Core Course Topics
1. Simple and compound sentences, and questions
2. Capitalization and punctuation
3. Conjunctions
4. Nouns
5. Pronouns
6. Verbs
7. Adverbs and Adjectives
8. Word order
9. Writing Process
10. Vocabulary
11. Paragraph organization
12. Audience awareness

Write simple, compound sentences, and questions.

Use appropriate punctuation and capitalization.

Use coordinating conjunctions to connect words, phrases, and simple sentences.

Use infinitives and gerunds as nouns.

Replace nouns with appropriate pronouns based on word order.

Write sentences using regular and irregular verbs in the simple past and present; past and present continuous; modals, and future tenses.

Use comparative and superlative adverbs and adjectives to describe.

Formulate statements, imperatives, and questions.

Write complete topic, supporting, and concluding sentences.

Use new vocabulary correctly in sentences.

Organize sentences in paragraph form.

Demonstrate audience awareness in different writing tasks.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of academic achievement will be identified and implemented by the class instructor. Methods will include, but not be limited to, assignments, quizzes, tests, and a final exam.

General Course Requirements and Recommendations
In order to progress to the next level, students must:

1. Actively participate in at least 80% of all class sessions
2. Average 75% or higher on all assignments, quizzes, and tests
3. Write at least two graded in-class handwritten writing assignments
4. Complete a final exam with an in-class handwritten writing assignment component (worth 25% of their final grade)

Texts
Contact the Faculty Chair for textbook information.

ELI104C - ELL Communication 4

Overview

Subject
English Language Institute

Academic Department
English Language Institute

School
Liberal Arts

Course Description
Develops low-intermediate-level college communication skills and interactions of non-native English speakers. Satisfactory completion qualifies students for ELI-105C. This course does not transfer nor count toward degree graduation requirements.

Course Pre-requisite(s)
A satisfactory score on the ELL placement test or successful completion of ELI103C ELL Communication 3 or ELI approval

Course Co-requisite(s)
None; however, ELI104W ELL Writing & Grammar 4 and ELI104R ELL Reading & Listening 4 are recommended

Credit Hours
2

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Academic Level
Undergraduate

Goals, Topics, and Objectives

Course Goals
ELI104C ELL Communication 4is designed to help English Language Learners (ELL) acquire low-intermediate-level college communication skills and strategies.

Core Course Topics
1. Note-taking
2. Discussion/debate skills
3. Critical thinking
4. Academic discourse markers and collocations
5. Speaking skills
6. Pronunciation skills

Apply a variety of note-taking strategies.

Express and support a stated position in group discussions and formal presentations.

Predict and analyze content.

Identify and use academic discourse markers and collocations to express ideas.

Prepare and participate in academic discussions and presentations.

Identify and practice the use of intonation, prominence, and pausing to create meaning.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of academic achievement will be identified and implemented by the class instructor. Methods will include, but not be limited to, assignments, presentations, individual and/or group projects, and quizzes/tests.

General Course Requirements and Recommendations
In order to progress to the next level, students must:

1. Actively participate in at least 80% of all class sessions
2. Average 75% or higher on all assignments, presentations, projects, and quizzes/tests
3. Make a final presentation (worth 25% of the final class grade)

Texts
Contact the Faculty Chair for textbook information.

ELI104R - ELL Reading & Listening 4

Overview

Subject
English Language Institute

Academic Department
English Language Institute

School
Liberal Arts

Course Description
Develops low-intermediate-level college-preparatory reading and listening skills for non-native English speakers. Satisfactory completion of this course qualifies students for ELI-105R. This course does not transfer nor count toward degree graduation requirements.

Course Pre-requisite(s)
A satisfactory score on the ELL placement test or successful completion of ELI103R ELL Reading & Listening 3 or ELI approval

Course Co-requisite(s)
None; however, ELI104W ELL Writing & Grammar 4 and ELI104C ELL Communication 4 are recommended

Credit Hours
5

Total Contact Hours
Total Instructor Contact Hours:
94

Total Student Contact Hours:
94

Academic Level
Undergraduate

Goals, Topics, and Objectives

Course Goals
ELI104R ELL Reading & Listening 4 is designed to help English Language Learners (ELL) attain low-intermediate-level reading and listening skills in order to understand more clearly and communicate more effectively in English.

Core Course Topics
1. Reading comprehension strategies including connecting, questioning and predicting
2. Main idea and supporting details
3. Vocabulary and idioms
4. Academic listening skills
5. Formal and informal language
6. American culture

Apply a variety of reading comprehension strategies including, but not limited to, connecting, questioning, predicting, visualizing and summarizing.

Identify main ideas and supporting details.

Demonstrate increased vocabulary and idiom knowledge.

Prepare and participate in academic discussions and presentations.

Distinguish between formal and informal language.

Analyze differences between American culture and native culture.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of academic achievement will be identified and implemented by the class instructor. Methods will include, but not be limited to, assignments, presentations, individual and/or group projects, quizzes, tests, and a final exam.

General Course Requirements and Recommendations
In order to progress to the next level, students must:

1. Actively participate in at least 80% of all class sessions
2. Average 75% or higher on all assignments, presentations, projects, quizzes, and tests
3. Take a final exam (worth 25% of the final class grade)

Texts
Contact the Faculty Chair for textbook information.

ELI104W - ELL Writing & Grammar 4

Overview

Subject
English Language Institute

Academic Department
English Language Institute

School
Liberal Arts

Course Description
Develops low-intermediate-level college-preparatory writing and grammar skills for non-native English speakers. Satisfactory completion qualifies students for ELI-105W. This course does not transfer nor count toward degree graduation requirements.

Course Pre-requisite(s)
A satisfactory score on the ELL placement test or successful completion of ELI103W ELL Writing & Grammar 3 or ELI approval

Course Co-requisite(s)
None; however, ELI104R ELL Reading & Listening 4 and ELI104C ELL Communication 4are recommended

Credit Hours
5

Total Contact Hours
Total Instructor Contact Hours:
94

Total Student Contact Hours:
94

Academic Level
Undergraduate

Goals, Topics, and Objectives

Course Goals
ELI104W ELL Writing & Grammar 4 is designed to help English Language Learners (ELL) acquire low-intermediate-level writing and grammar skills in order to communicate more clearly and accurately in English.

Core Course Topics
1. Simple and compound sentences
2. Capitalization and punctuation
3. Conjunctions and clauses
4. Verbs
5. Articles
6. Adjectives and adverbs
7. Word order
8. Paragraph organization
9. Vocabulary
10. Writing Process
11. Audience awareness

Formulate simple and compound sentences.

Demonstrate appropriate use of punctuation and capitalization.

Identify and practice subordinate, relative, and main clauses.

Formulate sentences using regular and irregular verbs in the simple past and present; past and present continuous, and future tenses.

Distinguish between and correctly use definite and indefinite articles.

Identify and use adjective and adverb clauses to add descriptive detail.

Generate statements, imperatives, and questions using correct word order.

Compose a paragraph comprised of a topic sentence with a controlling idea, supporting sentences, and a concluding sentence.

Discriminate and categorize new vocabulary into correct parts of speech.

Plan, draft, revise, and proofread a single paragraph.

Show evidence of ability to analyze and write for different audiences.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of academic achievement will be identified and implemented by the class instructor. Methods will include, but not be limited to, assignments, paragraphs, quizzes, tests, and a final exam.

General Course Requirements and Recommendations
In order to progress to the next level, students must:

1. Actively participate in at least 80% of all class sessions
2. Average 75% or higher on all assignments, paragraphs, quizzes, and tests
3. Write at least two graded in-class handwritten short essays
4. Complete a final exam with an in-class handwritten short essay component (worth 25% of their final grade)

Texts
Contact the Faculty Chair for textbook information.

ELI105C - ELL Communication 5

Overview

Subject
English Language Institute

Academic Department
English Language Institute

School
Liberal Arts

Course Description
Develops intermediate-level college communication skills and interactions of non-native English speakers. Satisfactory completion qualifies students for ELI-106C. This course does not transfer nor count toward degree graduation requirements.

Course Pre-requisite(s)
A satisfactory score on the ELL placement test or successful completion of ELI104C ELL Communication 4 or ELI approval

Course Co-requisite(s)
None; however, ELI105R ELL Reading & Study Skills 5 and ELI105W ELL Writing & Grammar 5 are recommended

Credit Hours
2

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Academic Level
Undergraduate

Goals, Topics, and Objectives

Course Goals
ELI105C ELL Communication 5 is designed to help English Language Learners (ELL) acquire intermediate-level college communication skills and strategies.

Core Course Topics
1. Note-taking
2. Discussion/debate skills
3. Critical thinking
4. Academic discourse markers and collocations
5. Pronunciation skills

Apply a variety of note-taking strategies.

Express and support a stated position in group discussions and formal presentations.

Predict and evaluate content.

Differentiate between, and use academic discourse markers and collocations to express ideas.

Practice the use of intonation, prominence, and pausing to create meaning.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of academic achievement will be identified and implemented by the class instructor. Methods will include, but not be limited to, assignments, presentations, individual and/or group projects, and quizzes/tests.

General Course Requirements and Recommendations
In order to progress to the next level, students must:

1. Actively participate in at least 80% of all class sessions
2. Average 75% or higher on all assignments, presentations, projects, and quizzes/tests
3. Make a final presentation (worth 25% of the final class grade)

Texts
Contact the Faculty Chair for textbook information.

ELI105R - ELL Reading & Study Skills 5

Overview

Subject
English Language Institute

Academic Department
English Language Institute

School
Liberal Arts

Course Description
Develops intermediate-level college-preparatory reading and study skills for non-native English speakers. Satisfactory completion of this course qualifies students for ELI-106R. This course does not transfer nor count toward degree graduation requirements.

Course Pre-requisite(s)
A satisfactory score on the ELL placement test or successful completion of ELI104R ELL Reading & Listening 4 or ELI approval

Course Co-requisite(s)
None; however, ELI105W ELL Writing & Grammar 5 and ELI105C ELL Communication 5 are recommended

Credit Hours
5

Total Contact Hours
Total Instructor Contact Hours:
94

Total Student Contact Hours:
94

Academic Level
Undergraduate

Goals, Topics, and Objectives

Course Goals
ELI105R ELL Reading & Study Skills 5 is designed to help English Language Learners (ELL) attain intermediate-level reading, listening, and speaking skills in order to understand more clearly and communicate more effectively in English.

Core Course Topics
1. Reading comprehension strategies including connecting, questioning, predicting, paraphrasing and summarizing
2. Locating and identifying topics, main ideas, and supporting details in authentic written and audio sources
3. Author's or speaker's message, audience and purpose
4. Textbook reading strategies, guided note taking, and active learning strategies used with written and audio sources
5. Vocabulary and idiom study
6. Academic discussion and presentation skills
7. American cultural literacy

Apply a variety of reading comprehension strategies including, but not limited to, connecting, questioning, predicting, paraphrasing and summarizing.

Locate and discriminate between topics, main ideas, and supporting details in teacher-selected authentic written and audio fiction and non-fiction texts.

Show written and verbal evidence of ability to read and listen critically and analyze the authors message, audience, and purpose.

Show evidence of the ability to use a range of study skills in an American classroom.

Illustrate increased vocabulary and idiom knowledge.

Design academic presentations and discussions.

Demonstrate American cultural literacy.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of academic achievement will be identified and implemented by the class instructor. Methods will include, but not be limited to, assignments, presentations, individual and/or group projects, quizzes, tests, and a final exam.

General Course Requirements and Recommendations
In order to progress to the next level, students must:

1. Actively participate in at least 80% of all class sessions
2. Average 75% or higher on all assignments, presentations, projects, quizzes, and tests
3. Take a final exam (worth 25% of the final class grade)

Texts
Contact the Faculty Chair for textbook information.

ELI105W - ELL Writing & Grammar 5

Overview

Subject
English Language Institute

Academic Department
English Language Institute

School
Liberal Arts

Course Description
Develops intermediate-level college-preparatory writing and grammar skills for non-native English speakers. Satisfactory completion qualifies students for ELI-106W. This course does not transfer nor count toward degree graduation requirements.

Course Pre-requisite(s)
A satisfactory score on the ELL placement test or successful completion of ELI104W ELL Writing & Grammar 4 or ELI approval

Course Co-requisite(s)
None; however, ELI105R ELL Reading & Study Skills 5 and ELI105C ELL Communication 5 are recommended

Credit Hours
5

Total Contact Hours
Total Instructor Contact Hours:
94

Total Student Contact Hours:
94

Academic Level
Undergraduate

Goals, Topics, and Objectives

Course Goals
ELI105W ELL Writing & Grammar 5 is designed to help English Language Learners (ELL) acquire intermediate-level writing and grammar skills in order to communicate more clearly and accurately in English.

Core Course Topics
1. Sentence variety
2. Verb tenses
3. Word order
4. Punctuation and mechanics
5. Transitions and connectors
6. Writing Process
7. Paragraph and short-essay organization
8. Topic sentences
9. Various modes
10. Vocabulary
11. Audience awareness
12. Academic integrity

Write complete simple, compound, and complex sentences.

Use a a variety of verb tenses in the present, past, future, and perfect.

Formulate statements, negatives, imperatives, and questions using correct word order.

Avoid mechanical errors such as run-ons, comma splices, and fragments.

Use time markers and transitional expressions to link main ideas within paragraphs and paragraphs within short essays.

Plan, draft, revise, and proofread paragraphs and short essays.

Combine paragraphs to formulate a short essay with a clearly defined central idea, coherent organization, and supporting details and examples.

Formulate clear, narrowly-focused, and precisely-worded topic sentences with a controlling idea.

Differentiate among and write using various modes: narration; description; illustration; comparison/contrast; persuasion; opinion; cause/effect, and/or argumentative.

Integrate and understand new academic vocabulary.

Show evidence of ability to analyze and write for different audiences.

Practice citing sources while conducting research to avoid plagiarism.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of academic achievement will be identified and implemented by the class instructor. Methods will include, but not be limited to, assignments, short essays, quizzes, tests, and a final exam.

General Course Requirements and Recommendations
In order to progress to the next level, students must:

1. Actively participate in at least 80% of all class sessions
2. Average 75% or higher on all assignments, short essays, quizzes, and tests
3. Write at least two graded in-class handwritten essays

Texts 4. Complete a final exam with an in-class handwritten essay component (worth 25% of their final grade)
Contact the Faculty Chair for textbook information.

ELI106C - ELL Communication 6

Overview

Subject
English Language Institute

Academic Department
English Language Institute

School
Liberal Arts

Course Description
Develops high-intermediate-level college communication skills and interactions of non-native English speakers. Satisfactory completion of this course, along with satisfactory completion of ELI-106R and 106W, qualifies students for ELL-130. This course does not transfer nor count toward degree graduation requirements.

Course Pre-requisite(s)
A satisfactory score on the ELL placement test or successful completion of ELI105C ELL Communication 5 or ELI approval

Course Co-requisite(s)
None; however, ELI106R ELL Reading & Study Skills 6 and ELI106W ELL Writing & Grammar 6 are recommended

Credit Hours
2

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Academic Level
Undergraduate

Goals, Topics, and Objectives

Course Goals
ELI106C ELL Communication 6 is designed to help English Language Learners (ELL) acquire high-intermediate-level college communication skills and strategies.

Core Course Topics
1. Note-taking
2. Discussion/debate skills
3. Critical thinking
4. Academic discourse markers and collocations
5. Pronunciation skills

Apply a variety of note-taking strategies.

Express and support a stated position in group discussions and formal presentations.

Predict and evaluate content.

Distinguish between, and make use of, academic discourse markers and collocations to express ideas.

Integrate the use of intonation, prominence, and pausing to create meaning.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of academic achievement will be identified and implemented by the class instructor. Methods will include, but not be limited to, assignments, presentations, individual and/or group projects, and quizzes/tests.

General Course Requirements and Recommendations
In order to progress to the next level, students must:

1. Actively participate in at least 80% of all class sessions
2. Average 75% or higher on all assignments, presentations, projects, and quizzes/tests
3. Make a final presentation (worth 25% of the final class grade)

Texts
Contact the Faculty Chair for textbook information.

ELI106R - ELL Reading & Study Skills 6

Overview

Subject
English Language Institute

Academic Department
English Language Institute

School
Liberal Arts

Course Description
Develops high-intermediate-level college-preparatory reading and study skills for non-native English speakers. Satisfactory completion of this course, along with ELI-106C and ELI-106W, qualifies students for ELL-130. This course does not transfer nor count toward degree graduation requirements.

Course Pre-requisite(s)
A satisfactory score on the ELL placement test or successful completion of ELI105R ELL Reading & Study Skills 5 or ELI approval

Course Co-requisite(s)
None; however, ELI106W ELL Writing & Grammar 6 and ELI106C ELL Communication 6 are recommended

Credit Hours
5

Total Contact Hours
Total Instructor Contact Hours:
94

Total Student Contact Hours:
94

Academic Level
Undergraduate

Goals, Topics, and Objectives

Course Goals
ELI106R ELL Reading & Study Skills 6 is designed to help English Language Learners (ELL) attain high-intermediate-level reading, listening, and speaking skills in order to understand more clearly and communicate more effectively in English.

Core Course Topics
1. Reading comprehension strategies including connecting, questioning, predicting, visualizing, and summarizing
2. Locating and identifying topics, main ideas, supporting details and patterns of organization in authentic written and audio sources
3. Author's or speaker's message, audience, purpose and tone
4. Textbook reading strategies, guided note taking and active learning strategies with written and audio sources
5. Vocabulary study and idioms
6. Academic discussion and presentation skills
7. American cultural literacy
8. Source credibility

Apply a variety of reading comprehension strategies including, but not limited to, connecting, questioning, predicting, visualizing, paraphrasing and summarizing.

Discriminate between topics, main ideas, supporting details within various patterns of organization in authentic written and audio fiction and non-fiction sources.

Show written and verbal evidence of ability to read and listen critically and analyze the authors message, audience, purpose and tone.

Show evidence of the ability to use a range of study skills in an American classroom.

Illustrate increased vocabulary and idiom knowledge.

Design and facilitate academic presentations and discussions.

Demonstrate American cultural literacy.

Recognize and practice researching credible sources.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of academic achievement will be identified and implemented by the class instructor. Methods will include, but not be limited to, assignments, presentations, individual and/or group projects, quizzes, tests, and a final exam.

General Course Requirements and Recommendations
In order to progress to the next level, students must:

1. Actively participate in at least 80% of all class sessions
2. Average 75% or higher on all assignments, presentations, projects, quizzes, and tests
3. Take a final exam (worth 25% of the final class grade)

Texts
Contact the Faculty Chair for textbook information.

ELI106W - ELL Writing & Grammar 6

Overview

Subject
English Language Institute

Academic Department
English Language Institute

School
Liberal Arts

Course Description
Develops high-intermediate-level college-preparatory writing and grammar skills for non-native English speakers. Satisfactory completion, along with ELI-106R and ELI 106-C, qualifies students for ELL-130. This course does not transfer nor count toward degree graduation requirements.

Course Pre-requisite(s)
A satisfactory score on the ELL placement test or successful completion of ELI105W ELL Writing & Grammar 5 or ELI approval

Course Co-requisite(s)
None; however, ELI106R ELL Reading & Study Skills 6 and ELI106C ELL Communication 6 are recommended

Credit Hours
5

Total Contact Hours
Total Instructor Contact Hours:
94

Total Student Contact Hours:
94

Academic Level
Undergraduate

Goals, Topics, and Objectives

Course Goals
ELI106W ELL Writing & Grammar 6 is designed to help English Language Learners (ELL) acquire high-intermediate-level writing and grammar skills in order to communicate more clearly and accurately in English.

Core Course Topics

1. Sentence variety
2. Punctuation and mechanics
3. Transitional words and expressions
4. Writing Process
5. Paragraph and essay organization
6. Thesis-driven short essays
7. Supporting information/details
8. Various modes
9. Vocabulary
10. Audience awareness
11. Academic integrity, research, and sources

Write and evaluate a variety of compound and complex sentences using coordinating and subordinating conjunctions.
Construct complete sentences, avoiding run-ons, comma splices, and fragments.
Compose academic transitional expressions and connectors to link main ideas within paragraphs and paragraphs within essays.
Formulate, construct, and revise paragraphs and essays.
Write paragraphs to form essays with clearly stated topic sentences that are supported with logical reasons, evidence, and examples.
Formulate clear, concise thesis statements appropriate for short essays.
Organize supporting information in a clear pattern, such as time, space, category, or importance.
Differentiate among and write using various modes of development: narration; description; illustration; comparison/contrast; argumentation (including counter-argumentation and refutation); opinion, problem and solution, and/or cause/effect.
Illustrate the ability to use academic voice in writing, including vocabulary and transitions.
Show evidence of ability to analyze and write for different audiences.
Model and develop the ability to integrate sources using reported speech, quotes, paraphrases, and summaries to avoid plagiarism; recognize and practice researching credible sources, and/or explain and defend sources to show appropriate use.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of academic achievement will be identified and implemented by the class instructor. Methods will include, but not be limited to, assignments, essays, quizzes, tests, and a final exam.

General Course Requirements and Recommendations
In order to progress to the next level, students must:

1. Actively participate in at least 80% of all class sessions
2. Average 75% or higher on all assignments, essays, quizzes, and tests
3. Write at least two graded in-class handwritten essays
4. Complete a final exam with an in-class handwritten essay component (worth 25% of their final grade)

Texts
Contact the Faculty Chair for textbook information.

ELL130 - Academic Writing and Reading for Ell

Overview

Subject
English Language Institute

Academic Department
English Language Institute

School
Liberal Arts

Course Description
Intended for English Language Learners (ELLs) whose placement scores indicate the need for instruction or review in order for them to write acceptable college compositions in ENG-131, or for ELLs who have successfully completed ELI-106 R, W, and C courses. Various methods such as lectures, group discussions, textbook exercises, peer review and conferences will be used to help students improve their expository writing skills. This course also emphasizes reading strategies and skills that will prepare English Language Learners for success in college level content-area and English composition courses. Students will learn how to make connections with a variety of authentic texts, practice strategies needed for critical reading, and expand their academic English vocabulary. Students must earn a grade of C or higher in ELL-130 before enrolling in ENG-131. This course is non-transferable.

Course Pre-requisite(s)
A satisfactory score on the ELL placement test or successful completion of ELI106R ELL Reading & Study Skills 6, ELI106W ELL Writing & Grammar 6, and ELI106C ELL Communication 6, or ELI approval.

Credit Hours
4

Total Contact Hours

Total Instructor Contact Hours:
62

Total Student Contact Hours:
62

Course Fee
10

Academic Level
Undergraduate

Goals, Topics, and Objectives

Course Goals
ELL130 Acad Writing & Reading for Ell is designed to prepare English Language Learners (ELL) to write at the college level, using formal English standards for increased clarity and accuracy. It is also intended to help ELLs build their vocabulary, fluency, and reading strategies to be prepared for reading-dependent college-level classes.

Core Course Topics

1. Reading comprehension
2. Vocabulary study
3. Writing process
4. Audience awareness and writer intent when reading and writing
5. Various modes
6. Thesis-driven essays
7. Paragraph and essay organization
8. Supporting information/details
9. Transitional words and expressions
10. Sentence variety and construction
11. Punctuation and mechanics
12. Academic integrity and research
13. Critical literacy

Integrate a variety of reading comprehension strategies including, but not limited to, connecting, questioning, predicting, visualizing, and summarizing.

Illustrate increased academic vocabulary.

Apply the Writing Process to plan, draft, revise, and proofread essays.

Create verbal and written evidence of the ability to analyze the author's purpose, audience, subject, tone, and context.

Identify, organize written and auditory information, and write using various modes of development: illustration; process; comparison/ contrast; cause/effect, and/or argumentation (including counter-argumentation and refutation).

Formulate a narrowly-focused and precisely-worded thesis statement.

Identify topics and main ideas in a variety of written work and write paragraphs to form essays with clearly stated topic sentences supported with logical reasons, evidence, and examples.

Identify and organize supporting details in a clear pattern, such as time, space, or importance.

Use transitional expressions to link main ideas within paragraphs and to link paragraphs within essays.

Use a variety of sentence structures correctly, avoiding run-ons, comma splices, and fragments.

Write an essay with a minimal number of spelling, capitalization, punctuation, and grammatical errors.

Develop an ability to quote, paraphrase, summarize, and use-in-text citations correctly to avoid plagiarism.

Look beyond the literal meaning of a text to determine its credibility, in order to analyze and evaluate the text's complete meaning and the author's intent.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of academic achievement will be identified and implemented by the class instructor. Methods will include, but not be limited to, assignments, essays/a research paper, quizzes, tests, and a final exam.

General Course Requirements and Recommendations
Instructors should provide students with a wide range of readings (both narrative and expository) including short stories, news articles, research studies, and content-area textbook chapters, with ample opportunity for discussion and analysis of the author's purpose, patterns of organization, and strategies.While additional assignments are necessary and should be identified by individual instructors in their syllabi, the following are required in all sections of ELL130 Acad Writing & Reading for Ell. All students must:Complete an in-class handwritten writing sample within the first two weeks of the course.Attend at least one conference with their instructor.Write three to four essays.Write one essay besides the diagnostic in class (handwritten and the essay may not be revised).Complete a final project with in-class handwritten components (worth 25% of the final class grade).

Texts
Contact the ELI Director/Faculty Chair for textbook information.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for ELL 130

ELL182 - Academic Reading for the ELL

Overview

Subject
English Language Institute

Academic Department
English Language Institute

School
Liberal Arts

Course Description
Emphasizes reading strategies and skills that will prepare English Language Learners for success in college level content-area and English composition courses. Students will learn how to make connections with a variety of authentic texts, practice strategies needed for critical reading, and expand their academic English vocabulary. Students must earn a grade of C or higher before enrolling in ENG-131. This course is non-transferable.

Course Pre-requisite(s)
A satisfactory score on the ELL placement test or successful completion of ELI106R ELL Reading & Study Skills 6, ELI106W ELL Writing & Grammar 6, and ELI106C ELL Communication 6 or ELI106T - Missing course, or ELI approval. It is highly recommended that ELL182 Academic Reading for the ELL be taken at the same time as ELL192 Academic Writing for the ELL.

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
10

Academic Level
Undergraduate

Goals, Topics, and Objectives

Course Goals
ELL182 Academic Reading for the ELL is designed to help English Language Learners (ELL) build their vocabulary, fluency, and reading strategies in order to be prepared for reading-dependent college-level classes

Core Course Topics
- Reading comprehension strategies including connecting, questioning, predicting, paraphrasing and summarizing
- Locating and identifying topics, main ideas, supporting details and patterns of organization in authentic written and audio sources
- Author's or speaker's message, audience, purpose and tone
- Academic summary
- Textbook reading strategies, guided note taking and active learning strategies with written and audio sources
- Vocabulary study and idioms
- Academic discussion and presentation skills
- American cultural literacy Source credibility

Integrate a variety of reading comprehension strategies including, but not limited to, connecting, questioning, predicting, visualizing and summarizing.

Discriminate between topics, main ideas, supporting details within various patterns of organization in authentic written and audio fiction and non-fiction sources.

Create graphic organizers and verbal evidence of ability to read and listen critically and analyze the authors message, audience, purpose and tone.

Summarize text using academic English.

Create and modify notes from textbook reading.

Illustrate increased vocabulary and idiom knowledge.

Design and facilitate academic presentations and discussions.

Demonstrate college-level American cultural literacy.

Recognize and practice researching credible sources, and/or explain and defend sources to show appropriate use.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of academic achievement will be identified and implemented by the class instructor. Methods will include, but not be limited to, assignments, individual and/or group projects, quizzes, tests, and a final exam.

General Course Requirements and Recommendations
Instructors should provide students with a wide range of readings (both narrative and expository) including short stories, poems, news articles, and content-area textbook chapters, with ample opportunity for discussion and analysis of author's purpose, patterns of organization, and strategies.

All students are required to take a final exam (worth 25% of the final class grade).

Grading Scale
A - E

Texts
Contact the Faculty Chair for textbook information.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for ELL 182

ELL192 - Academic Writing for the ELL

Overview

Subject
English Language Institute

Academic Department
English Language Institute

School
Liberal Arts

Course Description
Intended for English Language Learners (ELLs) whose placement scores indicate the need for instruction or review in order for them to write acceptable college compositions in ENG-131, or for ELLs who have successfully completed ELI-106W. Various methods such as lectures, group discussions, textbook exercises, peer review and conferences will be used to help students improve their expository writing skills. Students must earn a grade of C or higher in ELL-192 before enrolling in ENG-131. This course is non-transferable.

Course Pre-requisite(s)
A satisfactory score on the ELL placement test or successful completion of ELI106R ELL Reading & Study Skills 6, ELI106W ELL Writing & Grammar 6 and ELI106C ELL Communication 6 or ELI106T.

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
10

Academic Level
Undergraduate

Goals, Topics, and Objectives

Course Goals
ELL192 Academic Writing for the ELL is designed to prepare English Language Learners (ELL) to write at the college level, using formal English standards for increased clarity and accuracy.

Core Course Topics
1. Writing Process
2. Audience awareness and writer intent
3. Various modes
4. Thesis-driven essays
5. Paragraph and essay organization
6. Supporting information/details
7. Transitional words and expressions
8. Sentence variety and construction
9. Punctuation and mechanics
10. Academic integrity and research
11. Source credibility

Apply the Writing Process to plan, draft, revise, and proofread essays.

Consider purpose, audience, subject, tone, and context.

Differentiate among and write using various modes of development: illustration; process; comparison/contrast; cause/effect, and/or argumentation (including counter-argumentation and refutation).

Formulate a narrowly-focused and precisely-worded thesis statement.

Write paragraphs to form essays with clearly stated topic sentences that are supported with logical reasons, evidence, and examples.

Organize supporting information in a clear pattern, such as time, space, or importance.

Use transitional expressions to link main ideas within paragraphs and to link paragraphs within essays.

Use a variety of sentence structures correctly, avoiding run-ons, comma splices, and fragments.

Write an essay with a minimal number of spelling, capitalization, punctuation, and grammatical errors.

Develop an ability to quote, paraphrase, summarize and use-in-text citations correctly in order to avoid plagiarism.

Recognize and practice researching credible sources, and/or explain and defend sources to show appropriate use.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of academic achievement will be identified and implemented by the class instructor. Methods will include, but not be limited to, assignments, essays, quizzes, tests, and a final exam.

General Course Requirements and Recommendations
While additional assignments are necessary and should be identified by individual instructors in their syllabi, the following are required in all sections of ELL-192. All students must:

1. Complete an in-class handwritten writing sample within the first two weeks of the course.
2. Attend at least one conference with their instructor.

3. Write five to six essays.
4. Write one essay besides the diagnostic in class (handwritten and the essay may not be revised).
5. Complete a final exam with an in-class handwritten essay component (worth 25% of the final class grade).

Grading Scale
A - E
Texts
Contact the ELI Director/Faculty Chair for textbook information.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for ELL 192

EMS100 - EMT-Basic Fundamentals

Overview

Subject
Allied Health

Academic Department
Health, Education, and Human Services

School
Health & Human Services

Course Description
Presents the technical knowledge and skills necessary for certification as a Basic Emergency Medical Technician (EMT-B). Focuses on Basic Life Support (CPR), airway management, medical emergencies, trauma, disaster management, shock and resuscitation, emergency childbirth, psychological emergencies, as well as extrications and more. Meets the recommendations of the United States Department of Transportation, National Traffic Safety Administration, National Emergency Medical Services Core Content, Scope of Practice Model, National Education Standards, and the Committee on Accreditation of Educational Programs for the Emergency Medical Services Professions Curriculum Supplement. NOTE: Successful completion of this course is required for individuals to be eligible to take the National Registry Certifying Exam for EMT-Basics; this exam is not included in this course.

Course Pre-requisite(s)
ENG131 Introduction College Writing eligible

Course Co-requisite(s)
EMS107 Basic Procedures Lab, EMS109 EMT-Basic Clinical Externship

Credit Hours
9

Total Contact Hours
Total Instructor Contact Hours:
137

Total Student Contact Hours:
137

Course Fee
15

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
Credit for EMS100 EMT-Basic Fundamentals, EMS107 Basic Procedures Lab, and EMS109 EMT-Basic Clinical Externship (Corequisites) can be granted upon the presentation of a CURRENT EMT-Basic license from the State of Michigan and a National Registry of EMT-B certification.

Goals, Topics, and Objectives

Core Course Topics
1. Preparatory
2. Life Span Development & Public Health
3. Airway Management
4. Medicine
5. Traumatic Emergencies
6. Shock and Resuscitation
7. Special Populations
8. Clinical Behavior

Analyze the relationship between the law and ethics in EMS.
Evaluate and develop a management plan for a patient in cardiogenic, hypovolemic, neurogenic, anaphylactic, and septic shock.
Evaluate and develop a management plan for a patient with an altered mental status and an unknown history.
Evaluate and develop a management plan for the emergency care of a patient with an altered mental status and a loss of speech, sensory, or motor function.
Evaluate and develop a management plan for the emergency care of a patient with signs/symptoms of acute abdominal pain.
Differentiate proper from improper body mechanics for lifting and moving patients in emergency and non-emergency situations.
Differentiate between normal/healthy and detrimental physiological reactions to anxiety and stress.
Describe EMS systems, licensure, certification, registration, profession, professionalism, healthcare professional, ethics, peer review, Medical direction, and protocols.
Identify the role of EMS in local municipal & community prevention programs.
Describe the incidence, morbidity and mortality, and the human, environmental, and socioeconomic impact of unintentional and alleged unintentional injuries
Given several narrative circumstances, recommend a treatment plan in keeping with the ethical principles associated with EMS.
Distinguish between ethical and moral decisions in EMS.
Analyze disease risk in situations where the presence of contaminants poses a risk to the personnel, environment, patient, general public or equipment.

Describe the cellular environment and factors that precipitate disease in the human body.

Explain multiple organ dysfunction syndrome.

Describe neuroendocrine regulation.

Explain the inflammation response and its systemic manifestations.

Discuss the interrelationships between stress, coping, and illness

List the medications carried on the Basic-EMS unit and demonstrate their proper administration.

Recognize, manage and justify treatments for various respiratory emergencies.

State the generic name, medication forms, dose administration, action, indications and contraindications for the prescribed inhaler.

Recognize, manage and justify treatments for various cardiovascular emergencies.

Demonstrate the proper steps in the emergency medical care for the patient taking diabetic medicine with an altered mental status and a history of diabetes.

Differentiate between syncope and seizures.

Differentiate between the general category of those patients having an allergic reaction and those patients having an allergic reaction and requiring immediate medical care, including immediate use of an epinephrine auto injector.

List the signs/symptoms associated with poisoning and the proper patient management.

List the six factors that may make a drug or alcohol emergency life-threatening.

Differentiate between the various environmental emergencies including exposure to hot and cold environments, submersion, drowning, and diving emergencies.

Describe the characteristics of an individuals behavior which suggest that the patient is at risk for suicide.

Describe the procedures for handling abnormal deliveries, complications of pregnancy, and maternal complications of labor.

Discuss the steps of patient assessment, including the priority decision, as they relate to and are guided by the mechanism of injury.

Develop a treatment plan for the emergency medical care of the patient with signs and symptoms of shock.

Recommend the appropriate assessment/ treatment plans for the emergency care of patients with the following categorical injuries: soft tissue, burns, musculoskeletal, head/spinal trauma, eye/face/neck, and chest/abdomen/genitalia.

Identify the signs and symptoms of shock in the infant and child patient.

Summarize the emergency medical care strategies for respiratory distress and respiratory failure in the infant/child.

Explain the principles for interacting with patients and family members in situations involving death and dying.

Describe lifestyle changes you can make to help you deal with stress.

Describe measures you can take to protect yourself from exposure to diseases caused by pathogens and accidental and work-related injury.

Explain the importance of understanding basic pathophysiology.

Explain the concept of perfusion, including the physical and physiological components necessary to maintain perfusion.

Discuss the key physical and psychosocial characteristics of individuals in age groups from neonate to late adulthood.

Explain why an understanding of kinetics is helpful to understanding injury and trauma.

Describe accommodations and modifications to patient assessment and management required for patients with sensory impairments, patients with cognitive and emotional impairments, paralyzed patients, obese patients, homeless or poor patients, and abused patients.

Describe accommodations and modifications to patient assessment and management required for patients who are terminally ill and describe the philosophy of hospice care.

Discuss the components that should be included in a plan for responding to terrorism involving weapons of mass destruction.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
The entire Paramedic Program is a performance-based curriculum. All students completing each level of course-work will be required to pass both the applicable performance applications as well as a comprehensive topic exam. There are scheduled exams and a final written exam with discretionary quizzes throughout the program.

General Course Requirements and Recommendations
All course participants must be able to physically complete tasks associated with the performance-based assessments. All areas of final assessment, whether written and/or practical, must meet minimal competencies of 80% or better following testing criterion.Instructors (or their designees) reserve the right to require students to provide picture identification for test taking, graded papers or projects, or other appropriate purposes.
Grading Scale
Students will be assessed on the following scale:

A+ = 97-100%
A = 94-96%
A- = 92-93%
B+ = 88-91%
B = 85-87%
B- = 83-84%
C+ = 81-82%
C = 80%
C- = 77-79%
D+ = 74-76%
D = 72-73%
D- = 70-71%
E < 69% and below

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for EMS 100

EMS109 - Emt-Basic Clinical Externship

Overview

Subject
Allied Health

Academic Department
Health, Education, and Human Services

School
Health & Human Services

Course Description
Provides a structured clinical experience in the hospital and in the prehospital emergency medical service environment. Focuses on providing an opportunity to demonstrate learned assessment skills in real-life situations under appropriate supervision. NOTE: Successful completion of this course is required for individuals to be eligible to take the National Registry Certifying Exam for EMT-Basics; this exam is not included in this course. (Due to the nature of this course, all students must have completed the Health Careers medical packet, criminal background clearance, and provide proof of health insurance prior to attending clinical. Students must also provide proof of a current Healthcare Provider CPR card from the American Heart Association or the American Red Cross prior to attending clinical rotations.)

Course Pre-requisite(s)
ENG131 Introduction College Writing eligible

Course Co-requisite(s)
EMS100 EMT-Basic Fundamentals, EMS107 Basic Procedures Lab

Credit Hours
2

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
95

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
Credit for EMS100 EMT-Basic Fundamentals, EMS107 Basic Procedures Lab and EMS109 EMT-Basic Clinical Externship (Corequisites) can be granted upon the presentation of a CURRENT EMT-Basic license from the State of Michigan and a National Registry of EMT-B certification.

Goals, Topics, and Objectives

Core Course Topics
1. Clinical Behavior/Judgements
2. Assessments

Construct well-written run reports based on the completed patient encounters.
Perform multiple Vitals Assessments.
Demonstrate proper body mechanics when lifting and moving patients.
Demonstrate safe clinical decisions.
Demonstrate a clear and concise verbal radio report.
Demonstrate multiple Initial Patient Survey/Assessments.
Demonstrate multiple Secondary Patient Survey/Assessments.
Create a proper field impression for all basic level patients encountered.
Perform proper BLS airway management.
Assist EMS crews and hospital staff members at the skill level appropriate to classroom training at the time of the clinical experience.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
This curriculum is primarily evaluated on the mastery of skills. Students may demonstrate competency in less than the recommended hours or may need additional clinical/field experiences. Initial course hours must be completed during the scheduled semester. In addition to the skill mastery/assessments, all course participants must demonstrate professional attributes at all times or disciplinary actions will take place, which may include removal from the program.

General Course Requirements and Recommendations
See the clinical handbook for uniform requirements.

All course participants must be able to physically complete tasks associated with the duties of an EMT. See the clinical handbook for specifics.

Due to the nature of this course, all students must have completed the Health Careers Medical packet, criminal background clearance, and proof of current health insurance prior to attending clinical.

Instructors (or their designees) reserve the right to require students to provide picture identification for test taking, graded papers or projects or other appropriate purposes.

Students must have proof of a current Healthcare Provider CPR card from American Heart Association or American Red Cross.

Grading Scale
Students will be assessed on the following scale:

- 97-100% = A+
- 94-96% = A
- 92-93% = A-
- 88-91% = B+
- 85-87% = B
- 83-84% = B-
- 81-82% = C+
- 80% = C
- 77-79% = C-
- 74-76% = D+
- 72-73% = D
- 70-71% = D-
- < 69% and below = E

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for EMS 109

EMS200 - Paramedic I

Overview

Subject
Allied Health

Academic Department
Health, Education, and Human Services

School
Health & Human Services

Course Description
Provides an overview of preparatory EMS systems, injury prevention, medical, legal, and ethical issues as well as general patient assessment before progressing through advanced assessment in the areas of respiratory and neurologic conditions. Reviews life span development and public health for EMS. Course ends by focusing on pathophysiology as it relates to various body systems/functions in the presence of disease or injury.

Course Pre-requisite(s)
EMT Basic MI License, BIO134 Essentials Anatomy&Physiology or (BIO233 Anatomy and Physiology I and BIO234 Anatomy and Physiology II) with "C" or better. Admission to the Program

Course Co-requisite(s)
EMS206 Paramedic Procedures Lab I, EMS210 Paramedic II, and EMS291 Paramedic Clinical I

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
15

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Preparatory
2. Pathophysiology
3. Life Span Development
4. Public Health
5. Medicine
6. Clinical Judgment/Behavior
7. Shock & Resuscitation

Differentiate proper from improper body mechanics for lifting and moving patients in emergency and non-emergency situations. (Clinical Judgment)

Differentiate between normal/healthy and detrimental physiological reactions to anxiety and stress. (Preparatory)

Describe EMS systems, licensure, certification, registration, profession, professionalism, health-care professional, ethics, peer review, medical direction, and protocols. (Preparatory)

Identify the role of EMS in local municipal & community prevention programs. (Public Health)

Describe the incidence, morbidity and mortality, and the human environmental and socioeconomic impact of alleged unintentional injuries. (Life Span Development)

Analyze the relationship between the law and ethics in EMS. (Preparatory)

Given several narrative circumstances, recommend a treatment plan in keeping with the ethical principles associated with EMS. (Clinical Judgment; Preparatory)

Distinguish between ethical and moral decisions in EMS. (Preparatory)

Analyze disease risk in situations where the presence of contaminants poses a risk to the personnel, environment, patient, general public, or equipment. (Public Health)

Describe the cellular environment and factors that precipitate disease in the human body. (Pathophysiology; Medicine)

Explain multiple organ dysfunction syndrome (Pathophysiology)

Describe neuroendocrine regulation (Pathophysiology)

Explain the inflammation response and its systemic manifestations.(Pathophysiology)

Discuss the interrelationships between stress, coping, and illness. (Medicine; Preparatory)

Evaluate and develop a management plan for a patient in cardiogenic, hypovolemic, neurogenic, anaphylactic, and septic shock.(Clinical Judgment; Shock)

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
The entire Paramedic Program is a performance-based curriculum. All students completing each level of course-work will be required to pass both the applicable "performance" applications as well as a comprehensive topic exam.

There is a scheduled Mid-Term and Final written exam with discretionary quizzes throughout the program.

General Course Requirements and Recommendations
All course participants must be able to physically complete tasks associated with the performance-based assessments. All areas of final assessment, whether written and/or practical, must meet minimal competencies of 80% or better following testing criterion.

Instructors (or their designees) reserve the right to require students to provide picture identification for test taking, graded papers or projects or other appropriate purposes.

Grading Scale
Students will be assessed on the following scale:

- 97-100% = A+
- 94-96% = A
- 92-93% = A-
- 88-91% = B+
- 85-87% = B
- 83-84% = B-
- 81-82% = C+
- 80% = C
- 77-79% = C-
- 74-76% = D+
- 72-73% = D
- 70-71% = D-
- <69% and below = E

Texts
To be determined by program faculty.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for EMS 200

EMS206 - Paramedic Procedures Lab I

Overview

Subject
Allied Health

Academic Department
Health, Education, and Human Services

School
Health & Human Services

Course Description
This laboratory course develops overall patient management skills. Covers equipment, assessment, evaluation, treatment, documentation, communication, and more. Lab activities focus on team building techniques, IV and medication administration, basic and advanced airway management, and ECG monitoring.

Course Pre-requisite(s)
EMT Basic MI License, BIO134 Essentials Anatomy&Physiology or (BIO233 Anatomy and Physiology I and BIO234 Anatomy and Physiology II) with "C" or better. Admission to the Program

Course Co-requisite(s)
EMS200 Paramedic I, EMS210 Paramedic II, and EMS291 Paramedic Clinical I

Credit Hours
1.5

Total Contact Hours
Total Instructor Contact Hours:
49

Total Student Contact Hours:
49

Course Fee
30

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Preparatory
2. Pharmacology
3. Airway Management, Respirations, and Artificial Ventilation
4. Assessment
5. Medicine
6. Shock and Resuscitation
7. Clinical Behavior/Judgment

Develop correct field impressions of preprogrammed cardiac patients. (Assessment; Clinical Behavior/Judgment; Medicine)

Develop correct field impressions of preprogrammed respiratory patients. (Assessment; Clinical Behavior/Judgment; Medicine)

Create a valid treatment plan for all patients assessed. (Assessment; Clinical Behavior/Judgment)

Demonstrate safe clinical decisions. (Clinical Behavior/Judgment)

Demonstrate proper body mechanics when lifting and moving patients.(Preparatory; Clinical Behavior/Judgment)

Justify all treatment plans based on the pathophysiology and clinical evaluation of the patient with a cardiac complaint/disorder. (Clinical Behavior/Judgment)

Justify all treatment plans based on the pathophysiology and clinical evaluation of the patient with a respiratory complaint/disorder. (Clinical Behavior/Judgment)

Evaluate and treat all cardiac dysrhythmias per ACLS protocol. (Clinical Behavior/Judgment; Shock and Resuscitation)

Demonstrate proper venous cannulation. (Pharmacology; Clinical Behavior/Judgment)

Demonstrate proper ventilation management techniques. (Airway Management; Clinical Behavior/Judgment)

Critique peers in scenario-based performances. (Clinical Behavior/ Judgment)

Hypothesize treatment alternatives to difficult patient management situations. (Clinical Behavior/Judgment)

Develop team leadership skills through scenario performance. (Clinical Behavior/Judgment)

Construct a well-written run report based on the completed patient scenario. (Preparatory)

Develop a clear and concise style of verbal, radio communication. (Preparatory)

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
The entire Paramedic Program is a performance-based curriculum. All students completing each level of course-work will be required to pass both the applicable performance applications as well as a comprehensive topic exam. There is a scheduled Mid-Term and Final practical exam with discretionary quizzes throughout the program. This particular course is primarily performance-based making attendance paramount.

General Course Requirements and Recommendations
EMS lab courses meet for full class sessions during the final exam.

All course participants must be able to physically complete tasks associated with the performance-based assessments. All areas of final assessment, whether written and/or practical, must meet minimal competencies of 80% or better following testing criterion.

Instructors (or their designees) reserve the right to require students to provide picture identification for test taking, graded papers or projects or other appropriate purposes.

Grading Scale
Students will be assessed on the following scale:

- 97-100% = A+
- 94-96% = A
- 92-93% = A-
- 88-91% = B+
- 85-87% = B
- 83-84% = B-
- 81-82% = C+
- 80% = C
- 77-79% = C-
- 74-76% = D+
- 72-73% = D
- 70-71% = D-
- <69% and below = E

Texts
To be determined by program faculty

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for EMS 206

EMS210 - Paramedic II

Overview

Subject
Allied Health

Academic Department
Health, Education, and Human Services

School
Health & Human Services

Course Description
Begins with an overview of basic pharmacology and then introduces students to advanced pharmacological concepts. Intravenous access with fluid and medication administration is presented along with airway management. This course leads into cardiac rhythm recognition and assessment of the cardiac patient.

Course Pre-requisite(s)
EMT Basic MI License, BIO134 Essentials Anatomy&Physiology or (BIO233 Anatomy and Physiology I and BIO234 Anatomy and Physiology II) with "C" or better. Admission to the Program

Course Co-requisite(s)
EMS200 Paramedic I, EMS206 Paramedic Procedures Lab I, and EMS291 Paramedic Clinical I

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
15

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Pharmacology
2. Special Patient Populations
3. Clinical Judgement/Behavior
4. Airway Management
5. Medicine
6. Trauma
7. Anatomy and Physiology
8. Pathophysiology

Differentiate among the chemical, generic (nonproprietary), official (USP), and trade (proprietary) names of a drug.

Explain the special considerations in drug treatment with regard to pregnant, pediatric, and geriatric patients. (Pharmacology; Special Populations)

List & differentiate the phases of drug activity including the pharmaceutical, pharmacokinetic, and pharmacodynamics phases. (Pharmacology)

Describe the processes called pharmacokinetics and pharmacodynamics, including theories of drug action, drug-response relationships, factors altering drug responses, predictable drug responses, iatrogenic drug responses, and unpredictable adverse responses.(Pharmacology)

Perform mathematical conversions from the household system to the metric system. (Pharmacology)

Formulate the correct drug and applicable dosage for a given set of patients using information gained through this course. (Pharmacology; Clinical Judgment)

Describe the indications, equipment needed, technique used, precautions, and general principles for the following: peripheral venous or external jugular cannulation, intraosseous needle placement and infusion, and obtaining a blood sample. (Pharmacology)

Compare the ventilation techniques used for an adult patient to those used for pediatric patients. And describe special considerations in airway management and ventilation for the pediatric patient. (Airway Management)

Describe the indications, contraindications, advantages, disadvantages, complications, liter flow range, and concentration of delivered oxygen for the following supplemental oxygen delivery devices: a nasal cannula, simple facemask, partial-rebreather mask, nonrebreather mask, and venturi mask.(Airway Management)

Explain the indications, contraindications, advantages, disadvantages, complications, equipment, and technique for the following: endotracheal intubation by direct laryngoscopy, digital endotracheal intubation, dual lumen airway, nasotracheal intubation, repaid sequence intubation, endotracheal intubation using sedation, open cricothyrotomy, needle cricothyrotomy and extubation. (Airway Management; Medicine; Trauma)

Given several preprogrammed patients with non-traumatic pulmonary problems, demonstrate the appropriate assessment, prehospital care, and transport. (Airway Management; Medicine)

Identify the epidemiology, anatomy, physiology, pathophysiology, assessment findings, and management (including perhospital medications) for the following respiratory diseases and conditions: Adult Respiratory Distress Syndrome, Bronchial Asthma, Chronic Bronchitis, Emphysema, Pneumonia, Pulmonary Edema, Pulmonary Thromboembolism, neoplasms of the lung, Upper Respiratory Infections, Spontaneous Pneumothorax, and Hyperventilation Syndrome. (A&P; Pathophysiology; Pharmacology; Medicine; Trauma; Airway Management;& Clinical Judgment)

Based on the pathophysiology and clinical evaluation of a patient with chest pain, appraise the clinical problems according to their life-threatening potential. (Medicine; Clinical Judgment)

Given several preprogrammed patients with cardiac complaints, provide the appropriate assessment, treatment, and transport.(Pharmacology; Medicine; Clinical Judgment)

Recognize, manage, and justify treatments for various cardiac dysrhythmias.(Medicine; Clinical Judgment)

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
The entire Paramedic Program is a performance-based curriculum. All students completing each level of course work will be required to pass both the applicable performance applications as well as a comprehensive topic exam. There is a schedule Midterm and Final written exam with discretionary quizzes throughout the program.

General Course Requirements and Recommendations
All course participants must be able to physically complete tasks associated with the performance-based assessments. All areas of final assessment, whether written and/or practical, must meet minimal competencies of 80% or better following testing criterion.

Instructors (or their designees) reserve the right to require students to provide picture identification for test taking, graded paper, projects, or other appropriate purposes.

Grading Scale
Students will be assessed on the following scale:

- 97-100% = A+
- 94-96% = A
- 92-93% = A-
- 88-91% = B+
- 85-87% = B
- 83-84% = B-
- 81-82% = C+
- 80% = C
- 77-79% = C-
- 74-76% = D+
- 72-73% = D
- 70-71% = D-
- <69% and below = E

Texts
Determined by program faculty

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for EMS 210

EMS216 - Paramedic Procedures Lab II

Overview

Subject
Allied Health

Academic Department
Health, Education, and Human Services

School
Health & Human Services

Course Description
This laboratory course develops overall patient management skills. Covers equipment, assessment, evaluation, treatment, documentation, communication and more. Lab activities focus on the management of the cardiac patient, mega-code scenarios, spinal immobilization, traumatic injuries, and traumatic resuscitation.

Course Pre-requisite(s)
EMS200 Paramedic I, EMS210 Paramedic II, EMS206 Paramedic Procedures Lab I, and EMS291 Paramedic Clinical I

Course Co-requisite(s)
EMS220 Paramedic III, EMS230 Paramedic IV, EMS292 Paramedic Clinical II

Credit Hours
2

Total Contact Hours
Total Instructor Contact Hours:
64

Total Student Contact Hours:
64

Course Fee
30

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Preparatory
2. Pathophysiology
3. Pharmacology
4. Airway Management, Respirations, and Artificial Ventilation
5. Assessment
6. Medicine
7. Shock and Resuscitation
8. Trauma
9. EMS Operations
10. Clinical Behavior/Judgment

Develop correct field impressions of preprogrammed cardiac patients
(Assessment; Clinical Behavior/Judgment; Medicine)

Demonstrate the successful management of Mega-code scenarios.(Shock and Resuscitation; Airway Management; Pharmacology; Clinical Behavior/Judgment)

Create a valid treatment plan for all patients assessed.(Assessment; Clinical Behavior/Judgment)

Demonstrate safe clinical decisions. (Clinical Behavior/Judgment)

Demonstrate proper body mechanics, when lifting and moving patients.
(Preparatory; Clinical Behavior/Judgment)

Justify all treatment plans based on the pathophysiology and clinical evaluation of the patient with a cardiac complaint/disorder.
(Pathophysiology; Clinical Behavior/Judgment; Medicine)

Justify all treatment plans based on the pathophysiology and clinical evaluation of the patient with a traumatic injury/ disorder.(Pathophysiology; Clinical Behavior/Judgment; Trauma)

Evaluate and treat all cardiac dysrhythmias per ACLS protocol. (Shock and Resuscitation; Clinical Behavior/Judgment)

Demonstrate proper venous cannulation and ventilation management techniques. (Clinical Behavior/Judgment; Pharmacology; Airway Management)

Demonstrate proper spinal injury management. (Trauma; Clinical Behavior/Judgment; EMS Operations)

Critique peers in scenario-based performances. (Clinical Behavior/ Judgment)

Hypothesize treatment alternatives to difficult patient management
(Clinical Behavior/Judgment)

Develop team leadership skills through scenario performance.
(Assessment; Clinical Behavior/Judgment)

Construct a well-written run report based on the completed patient scenario. (Preparatory)

Develop a clear and concise style of verbal, radio communication.
(Preparatory)

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
The entire Paramedic Program is a performance-based curriculum. All students completing each level of course-work will be required to pass both the applicable performance applications as well as a comprehensive topic exam. There is a scheduled Mid-Term and Final practical exam with discretionary quizzes throughout the program. This particular course is primarily performance-based making attendance paramount.

General Course Requirements and Recommendations
EMS lab courses meet for full class sessions during the final exam.

All course participants must be able to physically complete tasks associated with the performance-based assessments. All areas of final assessment, whether written and/or practical, must meet minimal competencies of 80% or better following testing criterion.

Instructors (or their designees) reserve the right to require students to provide picture identification for test taking, graded papers or projects or other appropriate purposes.

Grading Scale
Students will be assessed on the following scale:

- 97-100% = A+
- 94-96% = A
- 92-93% = A-
- 88-91% = B+
- 85-87% = B
- 83-84% = B-
- 81-82% = C+
- 80% = C
- 77-79% = C-
- 74-76% = D+
- 72-73% = D
- 70-71% = D-
- <69% and below = E

Texts
To be determined by program faculty

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for EMS 216

EMS220 - Paramedic III

Overview

Subject
Allied Health

Academic Department
Health, Education, and Human Services

School
Health & Human Services

Course Description
Introduces the pathophysiology of respiratory disease and neurological emergencies, then integrates this knowledge with assessment findings to develop a field impression and deliver appropriate medical care, including an in-depth discussion of endocrine emergencies and the associated treatments. Significant course time details the anatomy, physiology, and pathophysiology of various types of trauma. The emphasis is on treating the "whole patient," avoiding treatment distractions of any singular injury.

Course Pre-requisite(s)
EMS200 Paramedic I, EMS206 Paramedic Procedures Lab I, EMS210 Paramedic II, EMS291 Paramedic Clinical I

Course Co-requisite(s)
EMS216 Paramedic Procedures Lab II, EMS230 Paramedic IV, EMS292 Paramedic Clinical II

Credit Hours
4

Total Contact Hours
Total Instructor Contact Hours:
62

Total Student Contact Hours:
62

Course Fee
15

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Anatomy and Physiology
2. Pathophysiology
3. Pharmacology
4. Airway Management
5. Assessment
6. Medicine
7. Trauma
8. Special Patient Populations
9. EMS Operations
10. Clinical Behavior / Judgment

Compare various airway and ventilation techniques used in the management of pulmonary diseases. (Airway Management; Medicine)

Identify the epidemiology, anatomy, physiology, pathophysiology, assessment findings, and management (including prehospital medications) for the following respiratory diseases and conditions: Adult Respiratory Distress Syndrome, Bronchial Asthma, Chronic Bronchitis, Emphysema, Pneumonia, Pulmonary Edema, Pulmonary Thromboembolism, neoplasms of the lung, Upper Respiratory Infections, Spontaneous Pneumothorax, and Hyperventilation Syndrome. (A & P; Pathophysiology; Pharmacology; Medicine; Trauma, Airway Management & Clinical Judgment)

Recommend and justify the appropriate assessment, prehospital care, and transport for several preprogrammed patients with non-traumatic pulmonary problems. (Clinical Judgment; Airway Management)

Differentiate between neurologic emergencies based on assessment findings.(Medicine)

Recommend and justify appropriate assessment, prehospital care, and transport for several preprogrammed patients with non-traumatic neurological emergencies. (Clinical Judgment; Medicine)

Differentiate between different endocrine emergencies based on assessment and history. (Medicine)

Recommend and justify appropriate assessment, prehospital care, and transport for several preprogrammed patients with endocrine emergencies. (Clinical Judgment; Medicine)

Explain the "Golden Hour" concept, and describe how it applies to prehospital emergency medical service. (Trauma)

Compare and contrast the types of vehicle impacts and their expected injuries. (Trauma)

Recommend and justify appropriate scene size-up, initial assessment, focused assessment, detailed assessment, prehospital care, and transport for several preprogrammed patients involving simulated blunt trauma patients. (Assessment; Trauma; Clinical Judgment)

Recommend and justify appropriate scene size-up, initial assessment, focused assessment, detailed physical exam, ongoing assessment plan, prehospital care, and transport for several preprogrammed patients involving simulated penetrating trauma patients. . (Assessment; Trauma; Clinical Judgment)

Describe differences in administration of intravenous fluid in the normotensive, hypotensive, or profoundly hypotensive patients. (Pharmacology)

Recommend and justify appropriate scene size-up, initial assessment, rapid trauma assessment or focused history and physical exam, detailed physical exam, prehospital care, transport, and ongoing assessment for several preprogrammed, simulated and moulaged hemorrhage and shock patients.(Clinical Judgment; Trauma)

Develop/formulate treatment priorities for patients with soft-tissue injuries in conjunction with: Airway/face/neck trauma. Thoracic trauma (open/closed) and Abdominal trauma. (Clinical Judgment; Trauma)

Describe and apply the "Rule of Nines" and the "Rule of Palms" methods for determining body surface area percentage of a burn injury. (Trauma)

Recommend and justify the appropriate assessment and field management for several scenarios involving thermal, inhalation, electrical, and chemical burn injury and radiation exposure patients. (Clinical Judgment; Trauma; EMS Operations)

Appraise the complications of burn injuries caused by trauma, blast injuries, airway compromise, respiratory compromise, and child abuse. (Trauma; Special Pt. Populations)

Hypothesize injuries based on the mechanism of injury, including direct, indirect, and pathologic. (Trauma)

Recommend and justify appropriate scene size-up, initial assessment, rapid trauma assessment or focused history and physical exam, detailed physical exam, prehospital care, transport, and ongoing assessment for several preprogrammed, simulated and moulaged musculoskeletal injury patients. (Clinical Judgment; Trauma)

Explain the pathophysiology, assessment, and management of a patient with: scalp injury, skull fracture, cerebral contusion, intracranial hemorrhage (including epidural, subdural, subarachnoid, and intracerebral hemorrhage), axonal injury (including concussion and moderate and severe diffuse axonal injury), facial injury, and neck injury. (Pathopysiology; Trauma; Medicine; Clinical Judgment)

Develop a management plan for the removal of a helmet for a head-injured patient.(Trauma; Clinical Judgment)

Describe the assessment findings associated with and the management of solid and hollow organ injuries, abdominal vascular injuries, pelvic fractures, and other abdominal injuries. (Trauma; Clinical Judgment)

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
The entire Paramedic Program is a performance-based curriculum. All students completing each level of course-work will be required to pass both the applicable performance applications as well as a comprehensive topic exam.

There is a scheduled Mid-Term and Final written exam with discretionary quizzes throughout the program.

General Course Requirements and Recommendations
All course participants must be able to physically complete tasks associated with the performance-based assessments. All areas of final assessment, whether written and/or practical, must meet minimal competencies of 80% or better following testing criterion.

Instructors (or their designees) reserve the right to require students to provide picture identification for test taking, graded papers or projects or other appropriate purposes.

Grading Scale
Students will be assessed on the following scale:

- 97-100% = A+
- 94-96% = A
- 92-93% = A-
- 88-91% = B+
- 85-87% = B
- 83-84% = B-
- 81-82% = C+
- 80% = C
- 77-79% = C-
- 74-76% = D+
- 72-73% = D
- 70-71% = D-
- <69% and below = E

Texts
To be determined by program faculty.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for EMS 220

EMS226 - Paramedic Procedures Lab III

Overview

Subject
Allied Health

Academic Department
Health, Education, and Human Services

School
Health & Human Services

Course Description
Develops patient management skills. Covers equipment, assessment, evaluation, treatment, documentation, communication, and more. Subject matter is complementary to the student's corresponding lecture course in EMS-240. Lab focuses on pediatric, gynecological, and obstetric patients. Lab also emphasizes patient management that incorporates the use of all ALS skills presented in the program.

Course Pre-requisite(s)
EMS220 Paramedic III, EMS230 Paramedic IV, EMS216 Paramedic Procedures Lab II, and EMS-292

Course Co-requisite(s)
EMS240 Paramedic V and EMS-293

Credit Hours
1

Total Contact Hours
Total Instructor Contact Hours:
32

Total Student Contact Hours:
32

Course Fee
30

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Preparatory
2. Pathophysiology
3. Pharmacology
4. Airway Management, Respirations, and Artificial Ventilation
5. Assessment
6. Medicine
7. Shock and Resuscitation
8. Special Patient Populations
9. Clinical Behavior/Judgment

Develop correct field impressions of preprogrammed cardiac patients. (Assessment; Clinical Behavior/Judgment; Medicine)

Develop correct field impressions of preprogrammed pediatric patients. (Assessment; Clinical Behavior/Judgment; Special Pt. Population)

Create a valid treatment plan for all patients assessed. (Assessment; Clinical Behavior/Judgment)

Demonstrate safe clinical decisions (Clinical Behavior/Judgment)

Demonstrate proper body mechanics when lifting and moving patients. (Preparatory; Clinical Behavior/Judgment)

Justify all treatment plans based on the pathophysiology and clinical evaluation of the patient with a cardiac complaint/disorder. (Clinical Behavior/Judgment, Pathophysiology; Medicine)

Justify all treatment plans based on the pathophysiology and clinical evaluation of the patient with an obstetrical /gynecological complaint/ disorder. (Clinical Behavior/Judgment; Pathophysiology; Special Pt. Population; Medicine)

Evaluate and treat all cardiac dysrhythmias per ACLS protocol.(Shock and Resuscitation; Clinical Behavior/Judgment)

Demonstrate proper venous cannulation. (Clinical Behavior/Judgment; Pharmacology)

Demonstrate proper ventilation management techniques. (Clinical Behavior/Judgment; Airway Management)

Critique peers in scenario-based performances. (Clinical Behavior/ Judgment)

Hypothesize treatment alternatives to difficult patient management situations. (Clinical Behavior/Judgment)

Develop team leadership skills through scenario performance. (Clinical Behavior/Judgment)

Construct a well-written run report based on the completed patient scenario. (Preparatory)

Develop a clear and cognitive style of verbal/radio communication. (Preparatory)

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
The entire Paramedic Program is a performance-based curriculum. All students completing each level of course-work will be required to pass both the applicable "performance" applications as well as a comprehensive topic exam.

There is a scheduled Mid-Term and Final practical exam with discretionary quizzes & exams throughout the program. This particular course is primarily performance-based making attendance paramount.

General Course Requirements and Recommendations
All course participants must be able to physically complete tasks associated with the performance-based assessments. All areas of final assessment, whether written and/or practical, must meet minimal competencies of 80% or better following testing criterion.

Instructors (or their designees) reserve the right to require students to provide picture identification for test taking, graded papers or projects or other appropriate purposes.

Grading Scale
Students will be assessed on the following scale:

- 97-100% = A+
- 94-96% = A
- 92-93% = A-
- 88-91% = B+
- 85-87% = B
- 83-84% = B-
- 81-82% = C+
- 80% = C
- 77-79% = C-
- 74-76% = D+
- 72-73% = D
- 70-71% = D-
- <69% and below = E

Texts
To be determined by program faculty.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for EMS 226

EMS230 - Paramedic IV

Overview

Subject
Allied Health

Academic Department
Health, Education, and Human Services

School
Health & Human Services

Course Description
Introduces pathophysiology of cardiovascular disease and discusses how to recognize and treat the associated dysrhythmias. Covers the following topics in a broad manner: anatomy and physiology (review), general pathophysiology, geriatric considerations, assessment and management of emergencies in the areas of hematology, gastroenterology, toxicology, substance abuse, urology and nephrology, behavioral and psychiatric disorders, and environmental emergencies.

Course Pre-requisite(s)
EMS200 Paramedic I, EMS210 Paramedic II, EMS206 Paramedic Procedures Lab I, and EMS291 Paramedic Clinical I

Course Co-requisite(s)
EMS220 Paramedic III, EMS216 Paramedic Procedures Lab II, and EMS292 Paramedic Clinical II

Credit Hours
4

Total Contact Hours
Total Instructor Contact Hours:
62

Total Student Contact Hours:
62

Course Fee
15

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Preparatory
2. Pathophysiology
3. Life Span Development
4. Pharmacology
5. Medicine
6. Trauma
7. Special Patient Populations
8. Clinical Judgment

Utilizing the results of the patient history, assessment findings, and ECG analysis, differentiate between and provide a treatment plan for patients with a variety of conditions. (Clinical Judgment; Medicine)

Identify and list the signs and symptoms of a dissecting thoracic or an abdominal aneurysm. (Medicine)

Describe and identify the communication and documentation protocols with medical direction and law enforcement used for termination of resuscitation efforts. (Preparatory)

Differentiate between gastrointestinal emergencies based on assessment findings. (Medicine)

Synthesize assessment findings and patient history information to accurately differentiate between pain of a urologic or nephrologic emergency and that of another origin. (Medicine)

Recommend and justify the appropriate assessment, treatment plan, and transport for several scenarios of poisoning or overdose patients. (Clinical Judgment; Medicine)

Describe the pathophysiology and clinical manifestations and prognosis associated with: Anemia, Leukemia, Lymphomas, Polycythemia, Disseminated Intravascular Coagulopathy, Hemophilia, Sickle Cell Disease, and Multiple Myeloma. (Pathophysiology; Medicine)

Explain the pathophysiology, predisposing factors, signs, symptoms and management of the following: Hypothermia, Superficial, and Deep Frostbite, Near-drowning, Decompression Illness, Diving Emergency, and Altitude Illness. (Pathophysiology; Trauma)

Differentiate between various behavioral and psychiatric disorders using the assessment and patient history findings. (Medicine)

Compare the pharmacokinetics of an elderly patient to that of a young patient, including drug distribution, metabolism, and excretion. (Pharmacology)

Describe the incidence, morbidity/mortality, risk factors, prevention strategies, pathophysiology, assessment, need for intervention and transport, and management for elderly medical patients with: pneumonia, COPD, pulmonary embolisms; AMI, heart failure, dysrhythmias, aneurysm, and hypertension; cerebral vascular disease, delirium, dementia, Alzheimer's, and Parkinson's disease; diabetes and thyroid disease; gastrointestinal problems, GI hemorrhage, and bowel obstruction; skin diseases and pressure ulcers; osteoarthritis and osteoporosis; hypothermia and hyperthermia; toxicological problems, including disorders, including depression and suicide. (Lifespan Development; Medicine; Trauma; Special Pt. Populations; Clinical Judgment)

Recommend and justify the appropriate management, treatment plan, and transport for geriatric patients preprogrammed with simulated injuries and various complaints.(Clinical Judgment; Special Patient Populations)

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
The entire Paramedic Program is a performance-based curriculum. All students completing each level of course-work will be required to pass both the applicable performance applications as well as a comprehensive topic exam.

There is a scheduled Mid-Term and Final written exam with discretionary quizzes throughout the program.

General Course Requirements and Recommendations
All course participants must be able to physically complete tasks associated with the performance-based assessments. All areas of final assessment, whether written and/or practical, must meet minimal competencies of 80% or better following testing criterion.

Instructors (or their designees) reserve the right to require students to provide picture identification for test taking, graded papers or projects or other appropriate purposes.

Grading Scale
Students will be assessed on the following scale:

- 97-100% = A+
- 94-96% = A
- 92-93% = A-
- 88-91% = B+
- 85-87% = B
- 83-84% = B-
- 81-82% = C+
- 80% = C
- 77-79% = C-
- 74-76% = D+
- 72-73% = D
- 70-71% = D-
- <69% and below = E

Texts
To be determined by program faculty.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for EMS 230

EMS240 - Paramedic V

Overview

Subject
Allied Health

Academic Department
Health, Education, and Human Services

School
Health & Human Services

Course Description
Covers specialty topics such as OB/GYN, newborn resuscitation, and pediatrics. Also covers 12-Lead ECG including application and interpretation.

Course Pre-requisite(s)
EMS216 Paramedic Procedures Lab II, EMS220 Paramedic III, EMS230 Paramedic IV, and EMS292 Paramedic Clinical II all with C or better

Course Co-requisite(s)
EMS226 Paramedic Procedure Lab III and EMS293 Paramedic Clinical III

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
15

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Pathophysiology
2. Life Span Development
3. Pharmacology
4. Assessment
5. Medicine
6. Shock and Resuscitation
7. 12 Lead ECG
8. Trauma
9. Special Patient Populations
10. Clinical Behavior/Judgment

Describe the pathophysiology, assessment, and management of the following gynecological emergencies:Pelvic Inflammatory Disease (PID), ruptured ovarian cyst, cystitis, mittelschmertz, endometritis, endometriosis, ectopic pregnancy, and vaginal hemorrhage.

Recommend and justify the appropriate management with the following gynecological emergencies: Pelvic Inflammatory Disease (PID), ruptured ovarian cyst, cystitis, mittelschmertz, endometritis, endometriosis, ectopic pregnancy, and vaginal hemorrhage.

Differentiate between a normal and an abnormal delivery.

Summarize neonatal resuscitation procedures.

Describe the procedures for handling abnormal deliveries, complications of pregnancy, and maternal complications of labor.

Recommend and justify the appropriate assessment, management, and transport for the mother and child for several preprogrammed patients involving simulated delivery situations.

Describe age-appropriate sites, equipment, techniques, and complications of vascular access for infants and children.

Integrate advanced life support skills with basic cardiac life support for infants and children.

Describe the epidemiology, including the incidence, morbidity/mortality, risk factors, prevention strategies, pathophysiology, assessment, and treatment of infants and children with the following: respiratory distress/failure, hypoperfusion, cardiac dysrhythmias, neurological emergencies, trauma, abuse and neglect, special healthcare needs and SIDS.

Recommend and justify the appropriate assessment, treatment and transport for several preprogrammed simulated pediatric patients.

Explain the placement and view of the heart provided by bipolar, unipolar (augmented), and precordial ECG leads.

Describe QRS axis and axis deviation.

Identify 12-Lead ECG tracings of a variety of conduction abnormalities.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
The entire Paramedic Program is a performance-based curriculum. All students completing each level of course-work will be required to pass both the applicable "performance" applications as well as a comprehensive topic exam.

There is a scheduled Mid-Term and Final written exam with discretionary quizzes throughout the program.

General Course Requirements and Recommendations
All course participants must be able to physically complete tasks associated with the performance-based assessments. All areas of final assessment, whether written and/or practical, must meet minimal competencies of 80% or better following testing criterion.

Instructors (or their designees) reserve the right to require students to provide picture identification for test taking, graded papers or projects or other appropriate purposes.

Grading Scale
Students will be assessed on the following scale:

- 97-100% = A+
- 94-96% = A
- 92-93% = A-
- 88-91% = B+
- 85-87% = B
- 83-84% = B-
- 81-82% = C+
- 80% = C
- 77-79% = C-
- 74-76% = D+
- 72-73% = D
- 70-71% = D-
- <69% and below = E

Texts
To be determined by program faculty.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for EMS 240

EMS291 - Paramedic Clinical I

Overview

Subject
Allied Health

Academic Department
Health, Education, and Human Services

School
Health & Human Services

Course Description
Provides a structured clinical experience in hospital and field environments where designated tasks in specific topic areas must be completed. This set of clinical rotations emphasizes intravenous access and global patient management. Also covers a variety of cardiac diseases and dysrhythmias.

Course Pre-requisite(s)
EMT Basic MI License, BIO234 Anatomy and Physiology II or (BIO233 Anatomy and Physiology I and BIO234 Anatomy and Physiology II) all with C grade or higher, MATH110 Intermediate Algebra eligible, and ENG131 Introduction College Writing eligible

Course Co-requisite(s)
EMS200 Paramedic I, EMS206 Paramedic Procedures Lab I, and EMS210 Paramedic II

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
144

Total Student Contact Hours:
144

Course Fee
95

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Preparatory
2. Pharmacology
3. Airway Management, Respirations, and Artificial Ventilation
4. Medicine
5. Clinical Behavior/Judgement

Demonstrate successful venipuncture using a proper, aseptic technique. (Pharmacology; Clinical Behavior/Judgement).

Demonstrate successful intravenous access using a proper, aseptic technique. (Pharmacology; Clinical Behavior/Judgement).

Perform proper BLS airway management. (Airway Management; Clinical Behavior/Judgement).

Apply the use of an oropharyngeal airway and tracheal suctioning. (Airway Management).

Demonstrate the proper technique for bag-valve-mask ventilation. (Airway Management).

Show the proper techniques for Endotracheal Intubation. (Airway Management).

Apply and analyze the three lead ECG. (Medicine).

Perform a comprehensive cardiac patient assessment. (Medicine).

Perform a comprehensive respiratory patient assessment. (Medicine).

Perform a comprehensive general medical assessment. (Medicine).

Perform a comprehensive neurological-complaint assessment. (Medicine).

Demonstrate the proper documentation of an EMS field report. (Preparatory; Clinical Behavior/Judgement).

Demonstrate the proper method of two-way radio communication per protocol. (Preparatory; Clinical Behavior/Judgement).

Develop a proper "field impression" for field experiences. (Clinical Behavior/Judgement).

Displays teamwork in a variety of settings. (Clinical Behavior/Judgement).

Serves others within the community. (Clinical Behavior/Judgement).

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
The curriculum is primarily evaluated on the mastery of skills. Students may demonstrate competency in less than the recommended hours or may need additional clinical/field experiences. Initial course hours MUST be completed during the scheduled semester or the student will not be allowed to continue on in the advanced level training. All course competencies MUST be successfully completed in order to graduate from the paramedic program. Documentation must be accurately submitted in a designated amount of time. Late work could result in the failure of this course.

In addition to the skill mastery assessments, all course participants must demonstrate professional attributes at all times or disciplinary actions will take place, which may include removal from the program.

SBL is required for successful completion of this course. This is defined as 8 hours total approved service hours.

Grading Scale
Students will be assessed on the following scale:

- 97-100% = A+
- 94-96% = A
- 92-93% = A-
- 88-91% = B+
- 85-87% = B
- 83-84% = B-
- 81-82% = C+
- 80% = C
- 77-79% = C-
- 74-76% = D+
- 72-73% = D
- 70-71% = D-
- <69% and below = E

Texts
To be determined by program faculty.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for EMS 291

EMS292 - Paramedic Clinical II

Overview

Subject
Allied Health

Academic Department
Health, Education, and Human Services

School
Health & Human Services

Course Description
Provides a structural clinical experience in the hospital and field environments where designated tasks in specific topic areas must be completed. This set of clinical rotations emphasizes airway management skills in the in the field; global cardiac patient management in the cardiac cath. lab; and neurological assessments and trauma patient management in a variety of clinical settings.NOTE: Due to the nature of this course, a student must have completed the Health Careers medical packet, drug screen, and criminal background clearance as required, and provide current ongoing proof of health insurance prior to attending advanced-level clinical.

Course Pre-requisite(s)
EMS200 Paramedic I, EMS206 Paramedic Procedures Lab I, EMS210 Paramedic II and EMS291 Paramedic Clinical I - all with a "C" grade or better

Course Co-requisite(s)
EMS216 Paramedic Procedures Lab II, EMS220 Paramedic III, and EMS230 Paramedic IV

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
144

Total Student Contact Hours:
144

Course Fee
45

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Preparatory
2. Pharmacology
3. Airway Management, Respirations, and Artificial Ventilation
4. Trauma
5. Clinical Behavior/Judgement

Demonstrate successful venipuncture using a proper, aseptic technique. (Pharmacology)

Demonstrate successful intravenous access using a proper, aseptic technique. (Pharmacology)

Perform proper ALS airway management. (Airway Management)

Demonstrate the proper placement of an endotracheal tube and perform endotracheal suctioning. (Airway Management)

Demonstrate the proper technique for bag-valve E.T. ventilation. (Airway Management)

Apply and analyze the three lead EKG. (Medicine; Clinical Behavior/Judgement)

Perform a comprehensive cardiac patient assessment. (Medicine; Clinical Behavior/Judgement)

Perform a comprehensive neurological-complaint assessment. (Medicine; Clinical Behavior/Judgement)

Perform a comprehensive trauma assessment. (Trauma; Clinical Behavior/Judgement)

Demonstrate the proper documentation of an EMS field report. (Preparatoroy; Clinical Behavior/Judgement)

Demonstrate the proper method of two-way radio communication per protocol. (Preparatory; Clinical Behavior/Judgement)

Develop a proper "field impression" for advanced life support field experiences.(Clinical Behavior/Judgement)

Displays teamwork in a variety of settings. (Clinical Behavior/Judgement)

Serves others within the community. (Clinical Behavior/Judgement)

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
The curriculum is primarily evaluated on the mastery of skills. Students may demonstrate competency in less than the recommended hours or may need additional clinical/field experiences. Initial course hours MUST be completed during the scheduled semester or the student will not be allowed to continue on in the advanced level training. All course competencies MUST be successfully completed in order to graduate from the paramedic program. Documentation must be accurately submitted in a designated amount of time. Late work could result in the failure of this course.

In addition to the skill mastery assessments, all course participants must demonstrate professional attributes at all times or disciplinary actions will take place, which may include removal from the program.

SBL is required for successful completion of this course. This is defined as 8 hours total approved service hours.

Grading Scale
Students will be assessed on the following scale:

- 97-100% = A+
- 94-96% = A
- 92-93% = A-
- 88-91% = B+
- 85-87% = B
- 83-84% = B-
- 81-82% = C+
- 80% = C
- 77-79% = C-
- 74-76% = D+
- 72-73% = D
- 70-71% = D-
- <69% and below = E

Texts
To be determined by program faculty.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for EMS 292

EMS293 - Paramedic Clinical III

Overview

Subject
Allied Health

Academic Department
Health, Education, and Human Services

School
Health & Human Services

Course Description
This competency-based capstone course provides a field internship in order to develop team leadership. Students must complete designated tasks in specific topic areas and in team lead positions with EMS transports. Students who need extended rotations to complete tasks from earlier in the year (who received permission to continue on) can do so after the requisite skills for this rotation have been met. Each individual's program portfolio is completed and assessed this semester.NOTE: Due to the nature of this course, all students must have completed the Health Careers medical packet, drug screen, and criminal background clearance as required, and provide current ongoing proof of health insurance prior to attending advanced level clinical.

Course Pre-requisite(s)
EMS220 Paramedic III, EMS230 Paramedic IV, EMS216 Paramedic Procedures Lab II, and EMS292 Paramedic Clinical II all with a C or better

Course Co-requisite(s)
EMS226 Paramedic Procedure Lab III and EMS240 Paramedic V

Credit Hours
5

Total Contact Hours
Total Instructor Contact Hours:
252

Total Student Contact Hours:
252

Course Fee
45

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Preparatory
2. Pharmacology
3. Airway Management, Respirations, and Artificial Ventialtion
4. Medicine
5. Trauma
6. Clinical Behavior/Judgment

Demonstrate successful venipuncture using a proper, aseptic technique. (Pharmacology; Clinical Behavior/Judgement)

Demonstrate successful intravenous access using a proper, aseptic technique. (Pharmacology; Clinical Behavior/Judgement)

Perform proper BLS/ALS airway management. (Airway Management; Clinical Behavior/Judgement)

Apply and analyze the three lead EKG. (Medicine; Clinical Behavior/Judgement)

Apply and analyze the 12-Lead EKG. (Medicine; Clinical Behavior/Judgement)

Demonstrate the proper documentation/report for all EMS field experiences. (Preparatory; Clinical Behavior/Judgement)

Demonstrate the proper method of two-way radio communication per protocol. (Preparatory; Clinical Behavior/Judgement)

Perform multiple comprehensive pediatric patient assessments. (Medicine; Special Patient Populations; Clinical Behavior/Judgement)

Perform multiple comprehensive OB/GYN patient assessments. (Special Patient Populations; Clinical Behavior/Judgement)

Perform multiple comprehensive general medical assessments on various age groups. (Medicine; Clinical Behavior/Judgement)

Perform multiple comprehensive neurological-complaint assessments. (Medicine; Clinical Behavior/Judgement)

Develop a proper "field impression" for all field experiences. (Clinical Behavior/Judgement)

Create and initiate an appropriate patient treatment plan for all field experiences. (Clinical Behavior/Judgement)

Organizes a comprehensive portfolio. (Clinical Behavior/Judgement)

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
The curriculum is primarily evaluated on the mastery of skills. Students may demonstrate competency in less than the recommended hours or may need additional clinical/field experiences. Initial course hours MUST be completed during the scheduled semester, or the student will not be allowed to continue on in the advanced level training. All course competencies MUST be successfully completed in order to graduate from the paramedic program. Documentation must be accurately submitted in a designated amount of time. Late work could result in the failure of this course.

Program Portfolios are due during this semester. These are assessed on a pass/fail basis. All EMS students complete this course with their portfolio properly completed, reviewed, and cleared by EMS administration.

In addition to the skill mastery assessments, all course participants must demonstrate professional attributes at all times or disciplinary actions will take place, which may include removal from the program.

Grading Scale
Students will be assessed on the following scale:

- 97-100% = A+
- 94-96% = A
- 92-93% = A-
- 88-91% = B+
- 85-87% = B
- 83-84% = B-
- 81-82% = C+
- 80% = C
- 77-79% = C-
- 74-76% = D+
- 72-73% = D
- 70-71% = D-
- <69% and below = E

Texts
To be determined by program faculty.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for EMS 293

ENG090A - Academic Literacies

Overview

Subject
English

Academic Department
English

School
Liberal Arts

Course Description
This course helps students develop their academic literacies in conjunction with college-level reading and writing in other courses. Course work will help students refine their reading and writing practices by asking them to think about how these skills work together in college and beyond. Course work will help students develop confidence as they learn how to meet the demands of reading and writing in diverse contexts.

Course Pre-requisite(s)
Students place into ENG090A Academic Literacies through guided self-placement and/or through multiple-measures assessment as determined by English Department guidelines. Students may appeal placement by scheduling an appointment with the Writing Center for an impromptu writing assessment.

Course Co-requisite(s)
Any course that meets the College's Social Sciences or Humanities General Education Requirements (MTA). Please check with an advisor for the full list (advising@hfcc.edu), or request it from the School of Liberal Arts (lainfo@hfcc.edu) This is a mandatory co-requisite; students must remain enrolled in both sections.

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
10

Academic Level
Undergraduate

Goals, Topics, and Objectives

Course Goals
This course will assist students in meeting the challenges of college-level reading and writing in their college courses. Students will learn about and practice reading and writing processes both as individual and integrated skills. They will also explore academic literacies and study skills that will enhance their academic capabilities.

Core Course Topics

1. Reading and Writing with Rhetorical Strategies

   A. Situational reading and writing
   B. Analytical reading and writing
   C. Writing/Reading and audiences
   D. Academic and non-academic voice
   E. Rhetorical genres and modes

2. Reading Strategies

   A. Reading for comprehension
   B. Recognizing genres and patterns
   C. Active reading
   D. Taking notes on textbooks and research
   E. Paraphrasing and Summarizing
   F. Evaluating sources

3. Writing Process

   A. Understanding contexts for writing and assignments
   B. Developing topics, ideas, and drafts
   C. Workshop and feedback
   D. Revision as a writing strategy
   E. Editing and proofreading

4. Academic Skills

   A. Reading and writing about academic texts
   B. Writing timed exams
   C. Academic integrity
   D. Academic engagement
   E. Campus culture and academic support

Adapt reading and writing strategies for application across curriculum.

Determine appropriate resources to all upon for assistance with academic and non-cognitive difficulties.

Demonstrate success in college level reading and writing assignments.

Demonstrate success in college level reading and writing assignments.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
All assessment of student reading and writing is based on the above course outcomes and is left to the discretion of the individual instructor. Assessment should focus on student development in academic reading and writing and success in co-requisite course(s). ENG090A Academic Literacies may only be taken as a co-requisite course with another college-level course and it may only be taken once per semester. This course does not substitute for ENG131 Introduction College Writing, ENG131A Intro College Writing (ALP), ENG131E Intro College Writing ALP-ELL, ENG132 College Writing and Research, or ENG135 Bus & Tech Writing & Research. Students who earn a grade of 'S' (satisfactory) may enroll in ENG131 Introduction College Writing.

General Course Requirements and Recommendations
Instructors must assess student abilities in academic reading and writing within the first two weeks of the course to determine if they are appropriately placed. Instructors must review students' syllabi for other courses and conference with students about reading/writing work in those courses. Students must complete regular reading assignments and compose at least two academic writing assignments during the semester. These assignments should be drawn from concurrent coursework if possible, but if students are in courses with light reading/writing requirements, instructors may assign work appropriate to a three-credit hour course. Students must show evidence of writing and reading strategies throughout the course. Instructors may choose to assess student practice through journals, homework, portfolios, or other ongoing coursework related to the work students are doing in other classes. Students must receive orientation to academic success resources on campus including The Writing Center, The Learning Lab, the Library, and Assisted Learning Services. While instructors may use letter or numerical grades to assess course work, the final grade assigned must be S (satisfactory) or U (unsatisfactory). The grade of S shall be given if students successfully complete 75% of the course work. In addition, instructors are highly encouraged to: Create a supportive, empowering environment in their classrooms in order to invite students into college culture; Hold regular one-on-one conferences with students; Create a workshop or laboratory space that focuses on individualized instruction to meet the demands of academic literacy in a student's coursework; Use non-prescriptive, collaborative, and encouraging assessments including workshops, revision practices, and portfolios; Welcome and support the diverse identities, backgrounds, and academic experiences of our students as essential foundations for the college community.

Texts
The curricular committee that oversees this course maintains a list of approved texts.

ENG094 - Accelerated Learning Program:read&writin

Overview

Subject
English

Academic Department
English

School
Liberal Arts

Course Description
This course is intended for students whose placement review indicates the need for additional instructional support in order for them to be successful in ENG-131. ENG-094 is a co-requisite of ENG-131A as part of the Accelerated Learning Program and provides writing, reading, study skills, and non-cognitive instructional support of the ENG-131 curriculum. Course work will help students develop as college writers and readers through discussion, workshop, homework, and occasional reading and writing assignments that complement ENG-131 work.

Course Pre-requisite(s)
Students place into ENG094 ALP: Reading and Writing and the ALP program through self-placement or through multiple-measures assessment as determined by English Department guidelines. Students may appeal placement by scheduling an appointment with the Writing Center for an impromptu, final writing placement assessment.

Course Co-requisite(s)
ENG131A Intro College Writing (ALP) section linked with the same instructor. This is a mandatory co-requisite. Students must remain enrolled in both sections to maintain enrollment in the ALP program.

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
10

Academic Level
Undergraduate

Goals, Topics, and Objectives

Course Goals
To help students become successful readers and writers in college. The course is explicitly designed as an accelerated learning class, pairing individualized developmental coursework with college-level coursework in order to help students more efficiently develop their college level reading and writing skills. Students should be engaged in developing their literacy and academic capabilities while receiving support for non-cognitive issues as they progress through the co-requisite ENG131 Introduction College Writing curriculum.

Core Course Topics

1. Rhetorical Awareness

   A. Situational writing
   B. Writing for audiences
   C. Academic and non-academic voice
   D. Rhetorical genres and modes
   E. Standardized language recognition

2. Writing Process

   A. Understanding contexts and assignments
   B. Developing topics and ideas
   C. Writing drafts
   D. Workshop and feedback
   E. Revision
   F. Editing and proofreading

3. Academic Skills

   A. Writing the academic essay
   B. Academic integrity
   C. Academic engagement
   D. Campus culture and academic support
   E. Study skills

4. Reading

   A. Vocabulary development
   B. Narrative and expository text work
   C. Disciplinary reading

5. Non-Cognitive Learning Issues

   A. External and internal influences on education
   B. Student services
   C. Emotions and learning
   D. Resistance and classroom engagement

Demonstrate success in ENG-131.

Determine appropriate resources to call upon for assistance with academic and non-cognitive difficulties.

Adapt reading and writing strategies for application across the curriculum.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
All assessment of student achievement is left to the discretion of the individual instructor. Assessment of ENG094 ALP: Reading and Writing is not contingent upon assessment in the co-requisite ENG131 Introduction College Writing class. ENG094 ALP: Reading and Writing replaces the ENG-093 and ENG-081 developmental sequence to accelerate enrollment into college level coursework. Students must earn a grade of S (satisfactory) in ENG-094 to meet their developmental English requirements before advancing to their next college level writing class. Students who do not pass ENG094 ALP: Reading and Writing must reenter the standard developmental sequence to take ENG-093 and, if necessary, ENG-081.

General Course Requirements and Recommendations
Requirements:

1. At least two individual conferences focusing on student reading and writing practices.
2. Formal instruction in academic reading.
3. An attendance/participation policy in accordance with instructor's ENG131 Introduction College Writing attendance policy.

Recommendations:

1. An emphasis on in-class participation.
2. Supplemental writing workshops for ENG131 Introduction College Writing assignments.
3. Frequent reading practice using ENG131 Introduction College Writing readings.
4. Frequent exploratory writing practice.
5. Building a supportive, communal classroom atmosphere.

In addition, instructors are highly encouraged to: Create a supportive, empowering environment in their classrooms in order to invite students into college culture;

Use non-prescriptive, collaborative, and encouraging assessments including workshops, revision practices, and portfolios;

Welcome and support the diverse identities, backgrounds, and academic experiences of our students as essential foundations for college community.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for ENG 094

ENG095E - ALP for ELL: Reading & Writing

Overview

Subject
English

Academic Department
English

School
Liberal Arts

Course Description
Intended for English language learners (ELLs) who need additional instructional support in order to be successful in ENG-131. ENG-095E is a co-requisite of ENG-131E as part of the Accelerated Learning Program (ALP) and provides writing, reading, and study skills instructional support of the ENG-131 curriculum. Course work will help ELL students develop as college writers and readers through discussion, workshops, homework, and reading and writing assignments that complement ENG-131 work.

Course Pre-requisite(s)
A satisfactory score on the ELL placement test or ELI approval

Course Co-requisite(s)
ENG131E Intro College Writing ALP-ELL section linked with the same instructor

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
10

Academic Level
Undergraduate

Goals, Topics, and Objectives

Course Goals
ENG095E ALP for ELL:Reading & Writing is explicitly designed as an accelerated learning class, pairing individualized ELL coursework with college-level coursework to help students develop their college level reading and writing skills.

Core Course Topics

1. Locating and identifying topics, main ideas, supporting details and patterns of organization in authentic written and audio sources
2. Reading comprehension strategies including connecting, questioning, predicting, paraphrasing and summarizing
3. Vocabulary study
4. Research
5. Academic integrity
6. Source credibility
7. Writing Process
8. Punctuation and mechanics

Identify main idea and supporting details in college level essays and articles from outside sources
Draw inferences from readings that lead to class discussion
Demonstrate techniques for vocabulary acquisition and expansion
Conduct research using HFC library databases
Integrate information from outside sources into essays by correctly using in-text citations
Evaluate the credibility of sources found on the internet
Revise work after collaboration with other students and/or suggestions from the instructor
Minimize errors in grammar and mechanics

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of ENG095E ALP for ELL:Reading & Writing is not contingent upon assessment in the co-requisite ENG131 Introduction College Writing class. ENG095E ALP for ELL:Reading & Writing replaces the ENG-092 and ENG-082 ELL courses to accelerate enrollment into college level coursework. Students must earn a grade of S (Satisfactory) in ENG095E ALP for ELL:Reading & Writing before advancing to their next college level writing class. Students who do not pass ENG095E ALP for ELL:Reading & Writing must take ENG-092 and, if necessary, ENG-082. Students may not repeat ENG095E ALP for ELL:Reading & Writing.

Assessment of academic achievement will be identified and implemented by the class instructor. Methods will include, but not be limited to, assignments, essays, quizzes, tests, and a departmental exit essay.

General Course Requirements and Recommendations
While additional assignments are necessary and should be identified by individual instructors in their syllabi, the following are required in all sections of ENG095E ALP for ELL:Reading & Writing. All students must:

1. Attend at least two individual conferences focusing on student reading and writing practices
2. Brainstorm ideas for essay topics and essay development
3. Rough draft workshop for ENG131E Intro College Writing ALP-ELL essays
4. Peer review rough drafts
5. Group discuss reading assignments to evaluate comprehension
6. Participate in grammar review and assessment (i.e. quizzes or short tests)
7. Practice vocabulary enhancement strategies
8. Demonstrate research and citation techniques (i.e. college databases, internet searches, in-text citation practice, Works Cited generators)

ENG131 - Introduction to College Writing

Overview

Subject
English

Academic Department
English

School
Liberal Arts

Course Description
ENG-131 is the first college-level composition course in a two-semester sequence. Students will be introduced to writing, reading, critical thinking, and using information at the college level. In particular, the course will help students develop writing that reveals rhetorical and academic flexibility.

Course Pre-requisite(s)
Students place into ENG131 Introduction College Writingthrough multiple-measures assessment as determined by English Department guidelines. Students who were required to take developmental coursework before ENG131 Introduction College Writing may also enroll in 131 by passing ENG090A Academic Literacies with a grade of S; 094 with a grade of S; or ELL182 Academic Reading for the ELL and ELL192 Academic Writing for the ELL with a C or better. Students may appeal placement by scheduling an appointment with the Writing Center for an impromptu, final writing placement assessment.

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
10

Academic Level
Undergraduate

General Education Category
English Composition, English Composition or Communications

Michigan Transfer Agreement (MTA) Category
Category 1: English Composition - Applied Degrees, Category 1: English Composition - Transfer Degrees, Category 2: English Composition or Communications - Applied Degrees, Category 2: English Composition or Communications - Transfer Degrees

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
Minimum Score on Other Exam

3

Other Exam Details

https://www.hfcc.edu/apply/high-school/advanced-placement

Goals, Topics, and Objectives

Course Goals
To prepare students to write clearly, read thoughtfully, think critically, and use information ethically at the college level.
Core Course Topics

1. **WRITE using different rhetorical strategies to communicate purposefully in a variety of situations while employing an effective writing process.**

Students' achievement of the outcome will be measured by their ability to:

1. Demonstrate awareness of genre and audience;
2. Create a text with a clear focus, either implied or stated in a thesis;
3. Illustrate or prove points with adequate detail and evidence;
4. Arrange ideas logically;
5. Use rhetorically appropriate language; and
6. Improve clarity and credibility through careful proofreading.

2. **READ by applying strategies to understand a variety of texts.**

Students' achievement of the outcome will be measured by their ability to

1. Summarize the main ideas of a piece of writing and
2. Respond to and critique documents, including published and student texts.
3. **THINK CRITICALLY by comparing and evaluating diverse viewpoints on a variety of topics and reaching conclusions based on available evidence and logic.**

Students' achievement of the outcome will be measured by their ability to:

1. Demonstrate awareness of different sides of an issue through argumentation;
2. Analyze writing strategies and contexts; and
3. Evaluate sources for reliability, relevance, and usefulness.
4. **USE INFORMATION by effectively integrating and synthesizing information from other sources into their writing.**

Students' achievement of the outcome will be measured by their ability to

1. Incorporate information from outside sources;
2. Navigate source documentation style guides; and
3. Document sources using both informal and formal citation styles to enhance credibility and avoid plagiarism.

WRITE: Demonstrate awareness of genre and audience.

WRITE: Create a text with a clear focus, either implied or stated in a thesis.

WRITE: Illustrate or prove points with adequate detail and evidence.

WRITE: Arrange ideas logically.

WRITE: Use rhetorically appropriate language.

WRITE: Improve clarity and credibility through careful proofreading.

READ: Summarize the main ideas of a piece of writing.

READ: Respond to and critique documents, including published and student texts.

THINK CRITICALLY: Demonstrate awareness of different sides of an issue through argumentation.

THINK CRITICALLY: Analyze writing strategies and contexts.

THINK CRITICALLY: Evaluate sources for reliability, relevance, and usefulness.

USE INFORMATION: Incorporate information from outside sources.

USE INFORMATION: Navigate source documentation style guides.

USE INFORMATION: Document sources using both informal and formal citation styles to enhance credibility and avoid plagiarism.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
All assessment of student writing is based on the above course outcomes and is left to the discretion of the individual instructor. Assessment should focus on student development of rhetorical and academic writing skills and should involve conversation with students.

General Course Requirements and Recommendations
Requirements
• Students must produce several essays of significant length.
• Instructors must create assignments that introduce skills of academic summary, critical analysis, research, and documentation at some point during the semester.
• Instructors must offer at least one assignment that is not a traditional academic essay.
• Instructors must expose students to a variety of texts to help them develop rhetorical awareness.
• Students must complete at least one graded in-class writing assignment.

Recommendations
Instructors are highly encouraged to
• provide supportive feedback through activities such as workshops, conferences, revision practices, and portfolios;
• equip students for navigating college culture;
• welcome and support the diverse identities, backgrounds, and academic experiences of our students as essential foundations for college community; and
• provide students some orientation to academic success resources on campus such as the Writing Center, Learning Lab, Eshleman Library, and Assisted Learning Services.

Texts
Every two years, the College Writing Committee will approve two common textbooks (a rhetoric and a writing handbook) for English-131 classes.

ENG131 Introduction College Writing instructors who have taught the course at HFC for at least two semesters may select their own text(s), which must meet the curricular requirements of the ENG131 Introduction College Writing Course Master.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for ENG 131

ENG131A - Introduction to College Writing (ALP)

Overview

Subject
English

Academic Department
English

School
Liberal Arts

Course Description
ENG-131A is the first college-level composition course in a two-semester sequence. Students will be introduced to writing, reading, critical thinking, and using information at the college level. In particular, the course will help students develop writing that reveals rhetorical and academic flexibility.

Course Pre-requisite(s)
Students place into ENG131A Intro College Writing (ALP) through multiple-measures assessment as determined by English Department guidelines. Students who were required to take developmental coursework before ENG131A Intro College Writing (ALP) may also enroll in ENG131A Intro College Writing (ALP) by passing EN081 and EN093 with a grade of S, 090A with a grade of S, or 082 and 092 with a C or better. Students may appeal placement by scheduling an appointment with the Writing Center for an impromptu, final writing placement assessment.

Course Co-requisite(s)
ENG094 ALP: Reading and Writing section linked with the same instructor

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
10

Academic Level
Undergraduate

General Education Category
English Composition, English Composition or Communications

Michigan Transfer Agreement (MTA) Category
Category 1: English Composition - Applied Degrees, Category 1: English Composition - Transfer Degrees, Category 2: English Composition or Communications - Applied Degrees, Category 2: English Composition or Communications - Transfer Degrees

Goals, Topics, and Objectives

Course Goals
To prepare students to write clearly, read thoughtfully, think critically, and use information ethically at the college level.
Core Course Topics

1. WRITE using different rhetorical strategies to communicate purposefully in a variety of situations while employing an effective writing process.

a) Students' achievement of the outcome will be measured by their ability to demonstrate awareness of genre and audience;

b) create a text with a clear focus, either implied or stated in a thesis;

c) illustrate or prove points with adequate detail and evidence;

d) arrange ideas logically;

e) use rhetorically appropriate language; and

f) improve clarity and credibility through careful proofreading.

2. READ by applying strategies to understand a variety of texts. Students' achievement of the outcome will be measured by their ability to

a) summarize the main ideas of a piece of writing and

b) respond to and critique documents, including published and student texts.

3. THINK CRITICALLY by comparing and evaluating diverse viewpoints on a variety of topics and reaching conclusions based on available evidence and logic. Students' achievement of the outcome will be measured by their ability to

a) demonstrate awareness of different sides of an issue through argumentation;

b) analyze writing strategies and contexts; and

c) evaluate sources for reliability, relevance, and usefulness.

4. USE INFORMATION by effectively integrating and synthesizing information from other sources into their writing. Students' achievement of the outcome will be measured by their ability to

a) incorporate information from outside sources;

b) navigate source documentation style guides; and

c) document sources using both informal and formal citation styles to enhance credibility and avoid plagiarism.

Demonstrate awareness of genre and audience;
Create a text with a clear focus, either implied or stated in a thesis;
Illustrate or prove points with adequate detail and evidence;
Arrange ideas logically;
Use rhetorically appropriate language; and
Improve clarity and credibility through careful proofreading.
Summarize the main ideas of a piece of writing and
Respond to and critique documents, including published and student texts.
Demonstrate awareness of different sides of an issue through argumentation;
Analyze writing strategies and contexts; and
Evaluate sources for reliability, relevance, and usefulness.
Incorporate information from outside sources;
Navigate source documentation style guides; and
Document sources using both informal and formal citation styles to enhance credibility and avoid plagiarism.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
All assessment of student writing is based on the above course outcomes and is left to the discretion of the individual instructor. Assessment should focus on student development of rhetorical and academic writing skills and should involve conversation with students.
General Course Requirements and Recommendations
Requirements
• Students must produce several essays of significant length.
• Instructors must create assignments that introduce skills of academic summary, critical analysis, research, and documentation at some point during the semester.
• Instructors must offer at least one assignment that is not a traditional academic essay.
• Instructors must expose students to a variety of texts to help them develop rhetorical awareness.
• Students must complete at least one graded in-class writing assignment.

Recommendations
Instructors are highly encouraged to
• provide supportive feedback through activities such as workshops, conferences, revision practices, and portfolios;
• equip students for navigating college culture;
• welcome and support the diverse identities, backgrounds, and academic experiences of our students as essential foundations for college community; and
• provide students some orientation to academic success resources on campus such as the Writing Center, Learning Lab, Eshleman Library, and Assisted Learning Services.

Texts
Every two years, the College Writing Committee will approve two common textbooks (a rhetoric and a writing handbook) for English-131 classes. ENG131 Introduction College Writing instructors who have taught the course at HFC for at least two semesters may select their own text(s), which must meet the curricular requirements of the ENG131 Introduction College Writing Course Master.

ENG131E - Intro to College Writing (ALP) for ELLs

Overview

Subject
English

Academic Department
English

School
Liberal Arts

Course Description
ENG 131E is the first college-level composition course in a two-semester sequence. Students will be introduced to writing, reading, critical thinking, and using information at the college level. In particular, the course will help students develop writing that reveals rhetorical and academic flexibility.

Course Pre-requisite(s)
A satisfactory score on the ELL placement test or ELI approval

Course Co-requisite(s)
ENG095E ALP for ELL:Reading & Writing section linked with the same instructor

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Academic Level
Undergraduate

Goals, Topics, and Objectives

Course Goals
To prepare students to write clearly, read thoughtfully, think critically, and use information ethically at the college level.
Core Course Topics
1. WRITE using different rhetorical strategies to communicate purposefully in a variety of situations while employing an effective writing process. Students' achievement of the outcome will be measured by their ability to

a) demonstrate awareness of genre and audience;

b) create a text with a clear focus, either implied or stated in a thesis;

c) illustrate or prove points with adequate detail and evidence;

d) arrange ideas logically;

e) use rhetorically appropriate language; and

f) improve clarity and credibility through careful proofreading.

2. READ by applying strategies to understand a variety of texts. Students' achievement of the outcome will be measured by their ability to

a) summarize the main ideas of a piece of writing and

b) respond to and critique documents, including published and student texts.

3. THINK CRITICALLY by comparing and evaluating diverse viewpoints on a variety of topics and reaching conclusions based on available evidence and logic. Students' achievement of the outcome will be measured by their ability to

a) demonstrate awareness of different sides of an issue through argumentation;

b) analyze writing strategies and contexts; and

c) evaluate sources for reliability, relevance, and usefulness.

4. USE INFORMATION by effectively integrating and synthesizing information from other sources into their writing. Students' achievement of the outcome will be measured by their ability to

a) incorporate information from outside sources;

b) navigate source documentation style guides; and

c) document sources using both informal and formal citation styles to enhance credibility and avoid plagiarism.

Demonstrate awareness of genre and audience;
Create a text with a clear focus, either implied or stated in a thesis;
Illustrate or prove points with adequate detail and evidence;
Arrange ideas logically;
Use rhetorically appropriate language; and
Improve clarity and credibility through careful proofreading.
Summarize the main ideas of a piece of writing and
Respond to and critique documents, including published and student texts.
Demonstrate awareness of different sides of an issue through argumentation;
Analyze writing strategies and contexts;
Evaluate sources for reliability, relevance, and usefulness.
Incorporate information from outside sources;
Navigate source documentation style guides; and
Document sources using both informal and formal citation styles to enhance credibility and avoid plagiarism.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
All assessment of student writing is based on the above course outcomes and is left to the discretion of the individual instructor. Assessment should focus on student development of rhetorical and academic writing skills and should involve conversation with students.

General Course Requirements and Recommendations
Requirements • Students must produce several essays of significant length. • Instructors must create assignments that introduce skills of academic summary, critical analysis, research, and documentation at some point during the semester. • Instructors must offer at least one assignment that is not a traditional academic essay • Instructors must expose students to a variety of texts to help them develop rhetorical awareness. • Students must complete at least one graded in-class writing assignment. Recommendations Instructors are highly encouraged to • provide supportive feedback through activities such as workshops, conferences, revision practices, and portfolios; • equip students for navigating college culture; • welcome and support the diverse identities, backgrounds, and academic experiences of our students as essential foundations for college community; and • provide students some orientation to academic success resources on campus such as the Writing Center, Learning Lab, Eshleman Library, and Assisted Learning Services.

Texts
Every two years, the College Writing Committee will approve two common textbooks (a rhetoric and a writing handbook) for English 131 classes.

ENG131 Introduction College Writing instructors who have taught the course at HFC for at least two semesters may select their own text(s), which must meet the curricular requirements of the ENG131 Introduction College Writing Course Master.

ENG131H - Honors Introduction to College Writing

Overview

Subject
English

Academic Department
English

School
Liberal Arts

Course Description
ENG-131 is the first college-level composition course in a two-semester sequence. Students will be introduced to writing, reading, critical thinking, and using information at the college level. In particular, the course will help students develop writing that reveals rhetorical and academic flexibility. One or more assignments will focus on a theme related to the Honors Colloquium topic(s).

Course Pre-requisite(s)
Students place into ENG131H Honors Intro College Writing through multiple-measures assessment as determined by English Department guidelines. Students who were required to take developmental coursework before ENG131H Honors Intro College Writing may also enroll in 131H by passing ENG-081 and ENG-093 with a grade of S; 090A with a grade of S; 094 with a grade of S; or 082 and 092 with a C or better. Students may appeal placement by scheduling an appointment with the Writing Center for an impromptu, final writing placement assessment.

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Academic Level
Undergraduate

General Education Category
English Composition, English Composition or Communications

Michigan Transfer Agreement (MTA) Category
Category 1: English Composition - Applied Degrees, Category 1: English Composition - Transfer Degrees, Category 2: English Composition or Communications - Applied Degrees, Category 2: English Composition or Communications - Transfer Degrees

Goals, Topics, and Objectives

Course Goals
To prepare students to write clearly, read thoughtfully, think critically, and use information ethically at the college level.
Core Course Topics
1. WRITE using different rhetorical strategies to communicate purposefully in a variety of situations while employing an effective writing process.

Students' achievement of the outcome will be measured by their ability to

a) demonstrate awareness of genre and audience;

b) create a text with a clear focus, either implied or stated in a thesis;

c) illustrate or prove points with adequate detail and evidence;

d) arrange ideas logically;

e) use rhetorically appropriate language; and

f) improve clarity and credibility through careful proofreading.

2. READ by applying strategies to understand a variety of texts. Students' achievement of the outcome will be measured by their ability to

a) summarize the main ideas of a piece of writing and

b) respond to and critique documents, including published and student texts.

3. THINK CRITICALLY by comparing and evaluating diverse viewpoints on a variety of topics and reaching conclusions based on available evidence and logic. Students' achievement of the outcome will be measured by their ability to

a) demonstrate awareness of different sides of an issue through argumentation;

b) analyze writing strategies and contexts; and

c) evaluate sources for reliability, relevance, and usefulness.

4. USE INFORMATION by effectively integrating and synthesizing information from other sources into their writing.

Students' achievement of the outcome will be measured by their ability to

a) incorporate information from outside sources;

b) navigate source documentation style guides;

c) document sources using both informal and formal citation styles to enhance credibility and avoid plagiarism; and

d) define a research interest related to the Honors Colloquium topic and develop the theme using multiple sources.

Demonstrate awareness of genre and audience;

Create a text with a clear focus, either implied or stated in a thesis;

Illustrate or prove points with adequate detail and evidence;

Arrange ideas logically;

Use rhetorically appropriate language; and

Improve clarity and credibility through careful proofreading.

Summarize the main ideas of a piece of writing and

Respond to and critique documents, including published and student texts.

Demonstrate awareness of different sides of an issue through argumentation;

Analyze writing strategies and contexts; and

Evaluate sources for reliability, relevance, and usefulness.

Incorporate information from outside sources;

Navigate source documentation style guides;

Document sources using both informal and formal citation styles to enhance credibility and avoid plagiarism; and

Define a research interest related to the Honors Colloquium topic and develop the theme using multiple sources.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
All assessment of student writing is based on the above course outcomes and is left to the discretion of the individual instructor. Assessment should focus on student development of rhetorical and academic writing skills and should involve conversation with students.
General Course Requirements and Recommendations
Requirements
• Students must produce several essays of significant length, including one or more related to the theme(s) of the Honors Colloquium classes.
• Instructors must create assignments that introduce skills of academic summary, critical analysis, research, and documentation at some point during the semester.
• Instructors must offer at least one assignment that is not a traditional academic essay.
• Instructors must expose students to a variety of texts to help them develop rhetorical awareness, including texts related to the theme(s) of Honors Colloquium classes.
• Students must complete at least one graded in-class writing assignment.
Recommendations
Instructors are highly encouraged to
• provide supportive feedback through activities such as workshops, conferences, revision practices, and portfolios;
• equip students for navigating college culture;
• welcome and support the diverse identities, backgrounds, and academic experiences of our students as essential foundations for college community; and
• provide students some orientation to academic success resources on campus such as the Writing Center, Learning Lab, Eshleman Library, and Assisted Learning Services.

Texts
Every two years, the College Writing Committee will approve two common textbooks (a rhetoric and a writing handbook) for English-131 classes. ENG-131 instructors who have taught the course at HFC for at least two semesters may select their own text(s), which must meet the curricular requirements of the ENG-131 Course Master.

ENG132 - College Writing and Research

Overview

Subject
English

Academic Department
English

School
Liberal Arts

Course Description
ENG-132 is the second college-level composition course in a two-semester sequence. Students will continue to write, read, think critically, and use information at the college level. In particular, students will be exposed to a range of literary texts and will be instructed in ethical, effective research writing.

Course Pre-requisite(s)
ENG131 Introduction College Writing with a C or better

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
10

Academic Level
Undergraduate

General Education Category
English Composition, English Composition or Communications

Michigan Transfer Agreement (MTA) Category
Category 1: English Composition - Applied Degrees, Category 1: English Composition - Transfer Degrees, Category 2: English Composition or Communications - Applied Degrees, Category 2: English Composition or Communications - Transfer Degrees

Goals, Topics, and Objectives

Course Goals
To prepare students to write clearly, read thoughtfully, think critically, and use information ethically at the college level.

Core Course Topics

1. WRITE: compose clearly, using rhetorical strategies and processes for analysis and research writing.

   Students' achievement of the outcome will be measured by their ability to

   - analyze literary works with attention to themes, conventions, and/or connections to personal or public contexts;
   - incorporate material from multiple sources, using direct quotation, paraphrase, and summary, as well as appropriate documentation; and
   - compose a coherent researched argument with a specific focus, supporting evidence, and a defensible conclusion.

2. READ: apply reading strategies to understand literary texts as well as college-level research texts.

   Students' achievement of the outcome will be measured by their ability to

   - summarize the main ideas of a text;
   - respond to and critique documents, including published and student texts; and
   - utilize information from assigned course materials and/or individual research to fulfill a purpose.

3. THINK CRITICALLY: compare and evaluate diverse viewpoints on a variety of topics and reach conclusions based on researched information and evidence.

   Students' achievement of the outcome will be measured by their ability to

   - evaluate sources for reliability, relevance, and usefulness;
   - make connections between texts and contexts related to a specific topic; and
   - synthesize ideas from multiple sources to analyze or further interpret a topic.

4. USE INFORMATION: utilize research strategies to identify and locate appropriate college-level sources and successfully integrate them into the student's own written work.

   Students' achievement of the outcome will be measured by their ability to

   - develop effective search strategies to find and evaluate information;
   - synthesize source material with their own ideas as part of a researched argument;
   - navigate source documentation style guides; and
   - document sources using formal citation styles to enhance credibility and avoid plagiarism.

Analyze literary works with attention to themes, conventions, and/or connections to personal or public contexts;

Incorporate material from multiple sources, using direct quotation, paraphrase, and summary, as well as appropriate documentation; and

Compose a coherent researched argument with a specific focus, supporting evidence, and a defensible conclusion.

Summarize the main ideas of a text;

Respond to and critique documents, including published and student texts; and

Utilize information from assigned course materials and/or individual research to fulfill a purpose.

Evaluate sources for reliability, relevance, and usefulness;

Make connections between texts and contexts related to a specific topic; and

Synthesize ideas from multiple sources to analyze or further interpret a topic.

Develop effective search strategies to find and evaluate information;

Synthesize source material with their own ideas as part of a researched argument;

Navigate source documentation style guides; and

Document sources using formal citation styles to enhance credibility and avoid plagiarism.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
All assessment of student writing is based on the above course outcomes and is left to the discretion of the individual instructor. Assessment should focus on student development of academic reading, writing, and research skills, and should involve conversation with students.

General Course Requirements and Recommendations
Requirements

- Students will read three to six full-length works, which can include fiction, non-fiction, poetry, plays, etc.
- Students must produce several essays, including at least one graded in-class writing assignment.
- Students will receive instruction in research skills including search strategies, evaluation and synthesis of sources, and ethical documentation practices.
- Students must produce a documented research essay (suggested length: five to eight pages) demonstrating the above skills, documented in either MLA or APA style, and worth a significant portion of the final course grade.

Recommendations

Instructors are highly encouraged to

- choose course texts that invite students into meaningful reading experiences and will expand their potential as college writers.
- provide supportive feedback through activities such as workshops, conferences, revision practices, and portfolios;
- equip students for navigating college culture;
- welcome and support the diverse identities, backgrounds, and academic experience of our students as essential foundations for college community;
- provide information to students about academic success resources on campus, such as the Writing Center, Learning Lab, and Assisted Learning Services; and
- visit Eshleman Library for research instruction.

Texts
Every two years, the College Writing Committee will approve a common writing handbook for English-132 classes.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for ENG 132

ENG132H - Honors College Writing and Research

Overview

Subject
English

Academic Department
English

School
Liberal Arts

Course Description
ENG-132 is the second college-level composition course in a two-semester sequence. Students will continue to write, read, think critically, and use information at the college level. In particular, students will be exposed to a range of literary texts related to the Honors Colloquium topics, and will be instructed in ethical, effective research writing.

Course Pre-requisite(s)
ENG131 Introduction College Writing or ENG131H Honors Intro College Writing with a B grade or better

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
10

Academic Level
Undergraduate

General Education Category
English Composition, English Composition or Communications

Michigan Transfer Agreement (MTA) Category
Category 1: English Composition - Applied Degrees, Category 1: English Composition - Transfer Degrees, Category 2: English Composition or Communications - Applied Degrees, Category 2: English Composition or Communications - Transfer Degrees

Goals, Topics, and Objectives

Course Goals
To prepare students to write clearly, read thoughtfully, think critically, and use information ethically at the college level.

Core Course Topics

1. WRITE: compose clearly, using rhetorical strategies and processes for analysis and research writing.

   Students' achievement of the outcome will be measured by their ability to
   • analyze literary works with attention to themes, conventions, and/or connections to personal or public contexts;
   • incorporate material from multiple sources, using direct quotation, paraphrase, and summary, as well as appropriate documentation; and
   • compose a coherent researched argument with a specific focus, supporting evidence, and a defensible conclusion.

2. READ: apply reading strategies to understand literary texts as well as college-level research texts.

   Students' achievement of the outcome will be measured by their ability to
   • summarize the main ideas of a text;
   • respond to and critique documents, including published and student texts; and
   • utilize information from assigned course materials and/or individual research to fulfill a purpose.

3. THINK CRITICALLY: compare and evaluate diverse viewpoints on a variety of topics and reach conclusions based on researched information and evidence.

   Students' achievement of the outcome will be measured by their ability to
   • evaluate sources for reliability, relevance, and usefulness;
   • make connections between texts and contexts related to a specific topic; and
   • synthesize ideas from multiple sources to analyze or further interpret a topic.

4. USE INFORMATION: utilize research strategies to identify and locate appropriate college-level sources and successfully integrate them into the student's own written work.

   Students' achievement of the outcome will be measured by their ability to
   • develop effective search strategies to find and evaluate information;
   • synthesize source material with their own ideas as part of a researched argument;
   • navigate source documentation style guides; and
   • document sources using formal citation styles to enhance credibility and avoid plagiarism.

Analyze literary works with attention to themes, conventions, and/or connections to personal or public contexts;

Incorporate material from multiple sources, using direct quotation, paraphrase, and summary, as well as appropriate documentation; and

Compose a coherent researched argument with a specific focus, supporting evidence, and a defensible conclusion.

Summarize the main ideas of a text;

Respond to and critique documents, including published and student texts; and

Utilize information from assigned course materials and/or individual research to fulfill a purpose.

Evaluate sources for reliability, relevance, and usefulness;

Make connections between texts and contexts related to a specific topic; and

Synthesize ideas from multiple sources to analyze or further interpret a topic.

Develop effective search strategies to find and evaluate information;

Synthesize source material with their own ideas as part of a researched argument;

Navigate source documentation style guides; and

Document sources using formal citation styles to enhance credibility and avoid plagiarism.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
All assessment of student writing is based on the above course outcomes and is left to the discretion of the individual instructor. Assessment should focus on student development of academic reading, writing, and research skills, and should involve conversation with students.

General Course Requirements and Recommendations
Requirements
• Students will read three to six full-length works, which can include fiction, non-fiction, poetry, plays, etc.
• Students must produce several essays, including at least one graded in-class writing assignment.
• Students will receive instruction in research skills including search strategies, evaluation and synthesis of sources, and ethical documentation practices.
• Students must produce a documented research essay (suggested length: eight or more pages) demonstrating the above skills, documented in either MLA or APA style, and worth a significant portion of the final course grade.

Recommendations
Instructors are highly encouraged to

• choose course texts that invite students into meaningful reading experiences and will expand their potential as college writers.
• provide supportive feedback through activities such as workshops, conferences, revision practices, and portfolios;
• equip students for navigating college culture;
• welcome and support the diverse identities, backgrounds, and academic experience of our students as essential foundations for college community;
• provide information to students about academic success resources on campus, such as the Writing Center, Learning Lab, and Assisted Learning Services; and
• visit Eshleman Library for research instruction.

Texts
Every two years, the College Writing Committee will approve a common writing handbook for English-132 classes.

ENG135 - Business & Technical Writing & Research

Overview

Subject
English

Academic Department
English

School
Liberal Arts

Course Description
Designed for students interested in developing professional workplace communication and critical thinking skills, ENG-135 focuses on designing documents such as resumes, letters, memos, instructions, proposals, and an extensive, research-based documented report for the kinds of readers they will address as professionals. This course should be especially valuable for students pursuing careers in engineering business, computer science, automotive technology, allied health, and other technical fields.

Course Pre-requisite(s)
ENG131 Introduction College Writing with a C or better. (Note: C- grade is not transferable and is not accepted by some programs at HFC)

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
10

Academic Level
Undergraduate

General Education Category
English Composition, English Composition or Communications

Michigan Transfer Agreement (MTA) Category
Category 1: English Composition - Applied Degrees, Category 1: English Composition - Transfer Degrees, Category 2: English Composition or Communications - Applied Degrees, Category 2: English Composition or Communications - Transfer Degrees

Goals, Topics, and Objectives

Course Goals
Students will learn to apply the rhetorical principles and techniques characteristic of professional communication. As a result of analyzing and writing documents, such as memos, letters, proposals, instructions, and reports, as well as preparing and delivering a short oral presentation, they will see how communication is an important dimension of professional effectiveness. They will become familiar with the following:

- The role of written, graphical, and oral communication within organizations.
- The challenges and problems associated with professional communication, including ethical concerns.
- The various audiences targeted by professional communication and the importance of adapting to them.
- The importance of information literacy in communicating effectively in professional settings.
- The methods of creating an effective professional voice or ethos in a document.
- The use of computer technology as a critical tool in professional communication.

Core Course Topics

1. Critical Thinking & Information Literacy

   Ability to analyze and evaluate information and identify the need for research to draw conclusions, formulate inferences, solve problems and make decisions. Students will also demonstrate information literacy skills by locating, evaluating, selecting, organizing, synthesizing, and ethically documenting information from multiple sources using both informal and formal formats, as appropriate for diverse writing situations.

2. Communication

   Ability to effectively communicate ideas appropriate to their discipline using standard English, through written and verbal communication.

Ability to read and understand a document and to organize a response suitable for the intended audience.

Ability to develop communication using effective rhetorical techniques and persuasive language.

Ability to generate and develop a defensible inference based on available information.

Ability to find and evaluate research material in terms of its credibility, accuracy, bias, and ethics.

Ability to incorporate selected research material effectively and purposefully into an assignment by using quotation, paraphrase, and a formal documentation style and by distinguishing clearly between sources of information.

Ability to synthesize those sources with the students own experience of a topic.

Ability to use page design (including sectioning and headings) and visual aids to enhance a documents readability and persuasiveness.

Ability to edit prose for grammatical correctness, accuracy, and diction and style appropriate for the audience.

Ability to purposefully critique their own and others written documents.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Students will complete multiple written assignments that demonstrate business and technical writing principles. One major assessment instrument is the professional, documented, research-based report, required in all sections. That research-based report will be worth at least 20% of the final course grade. This assessment requires students to demonstrate mastery of written communication as well as information literacy skills: finding, evaluating, and using sources effectively and documenting those sources in an accepted format such as APA or MLA style.

Texts
English-135 textbooks will satisfy the following criteria:
- A highly rhetorical focus that emphasizes how to adapt content, style, and organization to various workplace situations and conventions and that is apparent through both instructional text and examples.
- Sections on each of the communication genres taught, including oral presentations.
- An emphasis on visual communication strategies, including instruction on using graphics and formatting and examples of such visual aids working coherently and purposefully with written text.
- Ample instruction on information literacy principles and skills: finding, evaluating, and using sources with appropriate documentation.
- Profiles and analyses of ethical issues particular to professional communication.
- Affordability.
- Portability.
- Access to an electronic resource (e.g., a website) that supplements the text and that provides free exercises and models (preferred but not required).

The approved book list is maintained by and available from the English-135 Committee Chair and is reviewed annually.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for ENG 135

ENG139 - Creative Writing

Overview

Subject
English

Academic Department
English

School
Liberal Arts

Course Description
An elective writing course that provides students, at any level of experience, with a firm grasp of the fundamentals of imaginative self-expression. The assignments are diverse, ranging from traditional to contemporary forms of poetry, fiction, and drama, and imaginative non-fiction, in order to offer students a broad range of new opportunities for development of their own chosen subjects, and new ways to polish their own personal style.

Course Pre-requisite(s)
ENG131 Introduction College Writing eligible

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
10

Academic Level
Undergraduate

General Education Category
Humanities and Fine Arts

Michigan Transfer Agreement (MTA) Category
Category 5: Humanities and Fine Arts - Applied Degrees, Category 5: Humanities and Fine Arts - Transfer Degrees

Goals, Topics, and Objectives

Core Course Topics

1. The Language of Imaginative Writing
2. Discussion of the Writer's Notebook and Journal
3. The Collage Essay
4. The Childhood or Memoir Poem
5. Traditional Forms vs. Free Verse
6. Writing the Dramatic Dialogue
7. Found Poetry: Collage and Cut-Outs
8. Beginnings and Endings of Fiction
9. Character Development
10. Plot Development
11. Integrating Dialogue and Action in a Scene
12. The Short-short
13. The Short Story
14. The Prose Poem
15. The Myth, Legend, or Icon Poem or The Personification Poem
16. Revision

Employ various techniques of invention and discovery to generate personally relevant subject matter for their creative works.

Compose imaginative works, such as poems, fiction, drama, or non-fiction works that reveal an awareness of the importance of representation (showing) as well as narration (telling), and expressiveness (style) as well as exposition (explanation).

Comprehend the writer-audience relationship and how it is effectively controlled using point of view, authorial voice, style and tone, humor, and expressive language.

Implement and articulate an awareness of how all forms of imaginative writing uses oppositions to create tension within characters, poetic lines, dramatic plot twists, etc.

Compare and contrast the different ways character development and discovery is created in poetry, fiction, non-fiction, and drama.

Revise and re-see writings to create completeness and coherence in selected works. Students will be able to interpret evaluations and critiques, select works appropriate for revision, and carry out changes in the direction of improvement.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment is based on four to five writings in the writer's portfolio, which may be revised throughout the semester.

General:

- Students will produce a minimum of 2000 words of imaginative writing in various genres and forms.

Specific:

- Students will write poems, fiction, drama, and imaginative non-fiction revealing awareness of traditional and non-traditional formal patterns, styles, and techniques characteristic of creative writing.
- Based on the instructor's evaluations, critiques, and suggestions, as well as their own and/or other students' judgment, students will select works from their creative writing portfolios for revision and re-submission, using critical thinking.

General Course Requirements and Recommendations
Required:

• Create material for their own compositions, using the writer's notebook, individual exercises, and guided in-class collaborations.

• Examine published and unpublished models of traditional and non-traditional poems to identify techniques and approaches appropriate for their own imaginative writing.

• Practice expressiveness language, tone, and authorial voice.

• Write their own fiction, drama, and imaginative non-fiction considering the formats, techniques, and primary characteristics of these genres of prose writing.

• Revise selected works based on evaluations and critiques, carrying out changes in the direction of improvement.

• Engage in thoughtful discussions of assigned models, lecture topics, oral presentations of writing (both live and recorded), in-class exercises, and other course materials.

• Comprehend and use concepts essential the writing and the discussion of imaginative writing, such as line, stanza, imagery, color, stage directions, dialogue, chapter, plot, character development, etc.

Recommended:

• Students should learn the value of keeping a writer's notebook and portfolio.

• Students should learn steps writers take in preparing manuscripts for publication. This might include a journal review and the presentation of possible journals for the submission of work at the midterm or end of class.

• Students should attend readings by poets or writers visiting campus or appearing at other venues.

• Students should learn techniques for effective oral presentation of their own works.

• Students should learn how to make helpful, constructive comments on the work of fellow students.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for ENG 139

ENG231 - Intro to Literature: Poetry and Drama

Overview

Subject
English

Academic Department
English

School
Liberal Arts

Course Description
Focuses on reading, discussion, and written analysis of poems and plays in order to develop 1) skill in literary analysis and interpretation and 2) familiarity with the conventions of poetry and drama. The poems will be drawn from a variety of literary traditions; the plays range from ancient Greek tragedy to Shakespeare and modern drama.

Course Pre-requisite(s)
ENG131 Introduction College Writing with a C grade or better (Note: A "C-" grade is not transferable and is not accepted by some programs at HFC.)

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
10

Academic Level
Undergraduate

General Education Category
Humanities and Fine Arts

Michigan Transfer Agreement (MTA) Category
Category 5: Humanities and Fine Arts - Applied Degrees, Category 5: Humanities and Fine Arts - Transfer Degrees

Goals, Topics, and Objectives

Core Course Topics

1. Introduction to literature: genres, literary terms, and methods of discussing literature.
2. Writing about poetry and drama.
3. Works that illustrate the historical development of poetry in English.
4. Poetry from other traditions.
5. Greek drama.
6. Shakespeare: Tragedy and comedy.
7. Modern drama.

Formulate an interpretive thesis (as opposed to one which merely reports something factual about a literary text).
Compose an essay which either analyzes a literary text, for example by focusing on literary elements such as theme, character, setting, point of view, plot, imagery, metaphor, symbolism, etc., or analyzes the characteristic themes, features, and / or techniques of a given writer's works, or analyzes more than one literary text by comparing and contrasting works by more than one writer of the period or genre named in the course title.
Identify a range of key terms that are essential to an introductory-level understanding of literature, particularly poetry and drama.
Explain the crucial importance and /or distinctive achievement of William Shakespeare.
Explain the crucial importance and /or distinctive achievement of a major dramatist other than Shakespeare.
Explain the crucial importance and /or distinctive achievement of a major poet other than Shakespeare.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
General:

Assessment may include (but need not be limited to) quizzes, class participation, essays, and exams. But assessment must include a minimum of 2,000 words of formal literary analysis.

Specific:

1. Students will write at least one out-of-class essay of literary analysis that is at least 1,200 words in length.
2. Students will take at least one written exam which requires them to analyze literature; whether a single essay or multiple shorter responses, this expository component will count for at least half of the credit for that exam.

General Course Requirements and Recommendations
Required:

1. Students will read substantial and representative selections from the works of the Greek tragedians, of Shakespeare, and of British, American, and other English-language poets.
2. Students will read a substantial and representative selection of literary texts that explore themes such as self-knowledge, revenge, conflict, war, nature, race, family, and love.
3. Students will regularly engage in thoughtful discussion of the assigned readings.
4. Students will study (through assigned readings and /or classroom discussion) the cultural contexts from which the literature emerges.
5. Students will study concepts that are essential to an introductory-level understanding of poetry and drama, such as literature, literary criticism, genre, setting, character, plot, figurative language, style, tone, diction, irony, flashback, allusion, poetry, verse, rhythm, meter, rhyme, metaphor, simile, personification, alliteration, apostrophe, enjambement, epic poetry, narrative poetry, lyric poetry, Italian sonnet, English sonnet, free verse, drama, tragedy, comedy, protagonist, antagonist, tragic hero, catharsis, hubris, catastrophe, dialogue, soliloquy, chorus, orchestra, strophe, and groundlings.

Recommended:

1. Students should learn appropriate biographical information about assigned writers when such information could be helpful in understanding the literature.
2. Students should take quizzes on assigned readings.
3. Students should keep a journal in which they record their responses to assigned readings and class discussions.
4. Students should learn to place the major assigned writers and texts on an historical time line.
5. Students should satisfactorily read at least one poem or scene aloud, either in class or in the instructor's office.
6. Instructors should welcome and support the diverse identities, backgrounds, and academic experience of our students as essential foundations for college community.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for ENG 231

ENG232 - Introduction to the Short Story

Overview

Subject
English

Academic Department
English

School
Liberal Arts

Course Description
Focuses on reading, discussion, and written analysis of short stories in order to develop 1) skill in literary analysis and interpretation and 2) familiarity with the conventions of the short story. Stories are drawn from various literary traditions, although emphasis may be placed on the American tradition, which has been especially productive and influential. Emphasis may also be placed on the historical development of the short story as a distinct literary genre.

Course Pre-requisite(s)
ENG131 Introduction College Writing with a C or better (Note: A "C-" grade is not transferable and is not accepted by some programs at HFC.)

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
10

Academic Level
Undergraduate

General Education Category
Humanities and Fine Arts

Michigan Transfer Agreement (MTA) Category
Category 5: Humanities and Fine Arts

Goals, Topics, and Objectives

Core Course Topics

1. Introduction to literary terms and methods of discussing literature.
2. Precursors to the short story.
3. The emergence of the short story in the nineteenth century.
4. Twentieth-century short story.
5. The contemporary short story.

Formulate an interpretive thesis (as opposed to one which merely reports something factual about a literary text).
Compose an essay which either * analyzes a literary text, for example by focusing on literary elements such as theme, character, setting, point of view, plot, imagery, metaphor, symbolism, etc., or * analyzes the characteristic themes, features, and / or techniques of a given writer's works, or * analyzes more than one literary text by comparing and contrasting works by more than one short story writer. 3. Identify a range of key terms that are essential to an introductory-level understanding of literature, particularly the short story.
Distinguish a short story from a work of fiction that more properly belongs in some other genre, such as a tale, folktale, tall tale, fable, parable, allegory, anecdote, play, screenplay, novella, or novel.
Explain how and when the short story emerged as a distinct literary genre, or, more particularly, how the American short story evolved.
Explain the ways in which the short story provides a literary experience which is both similar to and different from that of the novel. 7. Explain the importance and/or achievement of some of the key short story writers.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
General:

Assessment may include (but need not be limited to) quizzes, class participation, essays, and exams. But assessment must include a minimum of 2,000 words of formal literary analysis.

Specific:

1. Students will write at least one out-of-class essay of literary analysis that is at least 1,200 words in length.
2. Students will take at least one written exam which requires them to analyze literature; whether a single essay or multiple shorter responses, this expository component will count for at least half of the credit for that exam.

General Course Requirements and Recommendations
Required:

1. Students will read at least 25 stories and, optionally, one novella.
2. Students will read short stories that come from a variety of nationalities, cultures or perspectives, and that represent various stages and notable achievements in the historical development of the genre.
3. Students will regularly engage in thoughtful discussion of the assigned readings.
4. Students will study (through assigned readings and/or classroom or online discussion) the cultural contexts from which the literature emerges.
5. Students will study concepts that are essential to an introductory-level understanding of the short story, such as literature, literary criticism, genre, theme, motif, structure, symbol, style, tone, irony, didacticism, romanticism, realism, naturalism, modernism, postmodernism, magical realism, narrative, fiction, short story, character, protagonist, antagonist, antihero, plot, exposition, conflict, suspense, foreshadowing, crisis, climax, resolution, slice of life, setting, point of view, narrator, stream of consciousness, epiphany, tale, folktale, tall tale, fable, parable, allegory, anecdote, frame story, novella, and novel.

Recommended:

1. Students should learn appropriate biographical information about assigned writers when such information could be helpful in understanding the literature.
2. Students should take quizzes on assigned readings.
3. Students should keep a journal in which they record their responses to assigned readings and class discussions.
4. Students should learn to place the major assigned writers and texts on an historical time line.
5. Students should be introduced to literary criticism (as opposed to book reviews) and recognize its prominent place in cultural and literary discussions.
6. Instructors should welcome and support the diverse identities, backgrounds, and academic experience of our students as essential foundations for college community.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for ENG 232

ENG233 - Introduction to the Novel

Overview

Subject
English

Academic Department
English

School
Liberal Arts

Course Description
Focuses on reading, discussion, and written analysis of novels in order to develop 1) skill in literary analysis and interpretation and 2) familiarity with the conventions of the novel. Students will read major novelists primarily from the nineteenth, twentieth, and twenty-first centuries. The titles chosen exemplify important developments and themes in prose fiction, each discussed as a statement of a particular author, a reflection of the times in which the work was written, and an enduring expression of human experience.

Course Pre-requisite(s)
ENG131 Introduction College Writing with a C grade or better (Note: A "C-" grade is not and is not accepted by some programs at HFC.)

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
10

Academic Level
Undergraduate

General Education Category
Humanities and Fine Arts

Michigan Transfer Agreement (MTA) Category
Category 5: Humanities and Fine Arts - Applied Degrees, Category 5: Humanities and Fine Arts - Transfer Degrees

Goals, Topics, and Objectives

Core Course Topics

1. Introduction to literary terms and methods of discussing literature.
2. The role of the epic and the romance in the development of the novel.
3. The role of the middle class in the development of the novel.
4. The evolution of narrative point of view.
5. The various genres of the novel, such as gothic, romantic, realistic, modernist, and postmodern.
6. Literary purpose (e.g. didacticism or social purpose).

Formulate an interpretive thesis (as opposed to one which merely reports something factual about a literary text).
Compose an essay which either analyzes a literary text, for example by focusing on literary elements such as theme, character, setting, point of view, plot, imagery, metaphor, symbolism, etc., or analyzes the characteristic themes, features, and / or techniques of a given writer's works; or analyzes more than one literary text by comparing and contrasting works by more than one novelist.
Identify some of the key literary features that are essential to an introductory-level understanding of the novel.
Describe the typical characteristics of novelistic genres such as neoclassicism, romanticism, realism, naturalism, modernism, postmodernism, or magical realism as evidenced in a writer's works.
Explain a few of the key ways in which the novel evolved over time.
Explain the crucial importance and /or distinctive achievement of some of the key novelists.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
General:

Assessment may include (but need not be limited to) quizzes, class participation, essays, and exams. But assessment must include a minimum of 2,000 words of formal literary analysis.

Specific:

1. Students will write at least one out-of-class essay of literary analysis that is at least 1,200 words in length.
2. Students will take at least one written exam which requires them to analyze literature; whether a single essay or multiple shorter responses, this expository component will count for at least half of the credit for that exam.

General Course Requirements and Recommendations
Requirements:

1. Students will read from four to seven novels.
2. Students will read a selection of novels that represent a broad range of literary accomplishments in that genre.
3. Students will regularly engage in thoughtful discussion of the assigned readings.
4. Students will study (through assigned readings and / or classroom discussion) the cultural contexts from which the literature emerges.
5. Students will study concepts that are essential to an introductory-level understanding of the novel, such as character, conflict, plot, setting, theme, symbol, point of view, metaphor, narrative style, epistolary novel, picaresque, stream-of-consciousness, motif, realism, romanticism, naturalism, magical realism, modernism, postmodernism, epiphany, structure, epic, romance, literary criticism, literary purpose (e.g., didacticism or social protest), irony, neoclassicism, romanticism, realism, naturalism, and magical realism.<

Recommendations:

1. Students should learn appropriate biographical information about assigned writers when such information could be helpful in understanding the literature.
2. Students should take quizzes on assigned readings.
3. Students should keep a journal in which they record their responses to assigned readings and class discussions.
4. Students should learn to place the major assigned writers and texts on an historical time line.
5. Students should satisfactorily read at least one passage aloud, either in class or in the instructor's office.
6. Instructors should welcome and support the diverse identities, backgrounds, and academic experience of our students as essential foundations for college community.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for ENG 233

ENG234 - Topics in Literature

Overview

Subject
English

Academic Department
English

School
Liberal Arts

Course Description
A course in literature organized around a specific theme, genre, or field of inquiry. The student may take the course twice for credit, six hours maximum, but only if the topic is different

Course Pre-requisite(s)
ENG131 Introduction College Writing with a C grade or better (Note: A C- grade is not transferable and is not accepted by some programs at HFC)

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
15

Academic Level
Undergraduate

General Education Category
Humanities and Fine Arts

Michigan Transfer Agreement (MTA) Category
Category 5: Humanities and Fine Arts - Applied Degrees, Category 5: Humanities and Fine Arts - Transfer Degrees

Goals, Topics, and Objectives

Core Course Topics
To be determined by the instructor who proposes a specific topic for this course.

Formulate an interpretive thesis (as opposed to one which merely reports something factual about a literary text).
Compose an essay which either analyzes a literary text, for example by focusing on literary elements such as theme, character, setting, point of view, plot, imagery, metaphor, symbolism, etc., or analyzes the characteristic themes, features, and / or techniques of a given writer's works, or analyzes more than one literary text by comparing and contrasting works by more than one writer of the period or genre named in the course title.
Identify some of the key literary terms that are essential to an introductory-level understanding of the literature named in the course title.
Identify features in a given text that would commonly be considered typical of the literature named in the course title.
Evaluate a few of the key ways in which the writers studied attempted to achieve the key goals of the literature named in the course title.
Explain the crucial importance and /or distinctive achievement of some of the key writers of the literature named in the course title.
Identify and analyze principal works and passages reflecting some of the pivotal themes of the literature named in the course title.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
General:

Assessment may include (but need not be limited to) quizzes, class participation, essays, and exams. But assessment must include a minimum of 2,000 words of formal literary analysis.

Specific:

1. Students will write at least one out-of-class essay of literary analysis that is at least 1,200 words in length.
2. Students will take at least one written exam which requires them to analyze literature; whether a single essay or multiple shorter responses, this expository component will count for at least half of the credit for that exam.

General Course Requirements and Recommendations
Required:

1. Students will read substantial and representative selections from the works of major writers essential to an introductory-level understanding of the literature named in the course title.
2. Students will read a substantial and representative selection of literary texts that explore the themes that are essential to an introductory-level understanding of the literature named in the course title.
3. Students will regularly engage in thoughtful discussion of the assigned readings.
4. Students will study (through assigned readings and / or classroom discussion) the cultural contexts from which the literature emerges.
5. Students will study concepts that are essential to an introductory-level understanding of the literature named in the course title, as well as other standard literary terms that are necessary for the study of literature in this course, such as character, conflict, plot, setting, theme, symbol, point of view, metaphor, rhyme, meter, allusion, irony, autobiography, essay, short story, novel, lyric poetry, etc.

Recommended:

1. Students should learn appropriate biographical information about assigned writers when such information could be helpful in understanding the literature.
2. Students should take quizzes on assigned readings.
3. Students should keep a journal in which they record their responses to assigned readings and class discussions.
4. Students should learn to place the major assigned writers and texts on an historical time line.
5. Students should satisfactorily read at least one short work or passage aloud, either in class or in the instructor's office.
6. Instructors should welcome and support the diverse identities, backgrounds, and academic experience of our students as essential foundations for college community.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for ENG 234

ENG235 - American Literature Before 1900

Overview

Subject
English

Academic Department
English

School
Liberal Arts

Course Description
Focuses on reading, discussion, and written analysis of early American literature in order to understand its meaning and its relation to the development of American thought and tradition. Authors include Emerson, Poe, Hawthorne, Thoreau, Douglass, Melville, Dickinson, Whitman, and Twain.

Course Pre-requisite(s)
ENG131 Introduction College Writing with a C grade or better (Note: A C- grade is not transferable and is not accepted by some programs at HFC)

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
15

Academic Level
Undergraduate

General Education Category
Humanities and Fine Arts

Michigan Transfer Agreement (MTA) Category
Category 5: Humanities and Fine Arts - Applied Degrees, Category 5: Humanities and Fine Arts - Transfer Degrees

Goals, Topics, and Objectives

Core Course Topics

1. Introduction to literary terms and methods of discussing literature.
2. Early American literature (optional): Pre-Columbian, Puritan, and / or Enlightenment / Revolutionary.
3. Romanticism, transcendentalism, and reform (1820-1865).
4. Realism and naturalism (1865-1900).

Formulate an interpretive thesis (as opposed to one which merely reports something factual about a literary text).
Compose an essay which either analyzes a literary text, for example by focusing on literary elements such as theme, character, setting, point of view, plot, imagery, metaphor, symbolism, etc., or analyzes the characteristic themes, features, and / or techniques of a given writer's works, or analyzes more than one literary text by comparing and contrasting works by more than one writer of the period or genre named in the course title.
Identify features in a given text from this period that would commonly be considered typical of American literature and would mark it as the expression of a distinctly American culture.
Evaluate a few of the key ways in which American writers of this period attempted to a) define or inaugurate a distinctively American literary tradition; b) incorporate aspects of American life (language, politics, frontier practices, etc.) into the literature; or c) produce texts that could bring American social and political life closer to the founding ideals of the republic.
Explain the crucial importance and / or distinctive achievement of some of the key American writers from this period.
Identify and analyze principal works and passages reflecting some of the pivotal themes in American culture.
Identify some of the key literary terms that are essential to an introductory-level understanding of American literature from this period.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
General:

Assessment may include (but need not be limited to) quizzes, class participation, essays, and exams. But assessment must include a minimum of 2,000 words of formal literary analysis.

Specific:

1. Students will write at least one out-of-class essay of literary analysis that is at least 1,200 words in length.
2. Students will take at least one written exam which requires them to analyze literature; whether a single essay or multiple shorter responses, this expository component will count for at least half of the credit for that exam.

General Course Requirements and Recommendations
Required:

1. Students will read substantial and representative selections from the works of Emerson, Poe, Hawthorne, Thoreau, Melville, Douglass, Stowe, Whitman, Dickinson, Twain, Crane, and others.
2. Students will read a substantial and representative selection of literary texts that explore the themes of nature, the frontier, racial identity, democracy, individualism, self-reliance, the burden of history, liberty, revolution, slavery, technology, immigration, urbanization, work, and violence.
3. Students will regularly engage in thoughtful discussion of the assigned readings.
4. Students will study (through assigned readings and / or classroom discussion) the cultural contexts from which the literature emerges.
5. Students will study concepts that are essential to an introductory-level understanding of American literature before 1900, such as character, conflict, plot, setting, theme, symbol, point of view, metaphor, rhyme, meter, allusion, irony, autobiography, essay, short story, novel, lyric poetry, epic poetry, romanticism, transcendentalism, slave narrative, realism, naturalism, and local color.

Recommended:

1. Students should learn appropriate biographical information about assigned writers when such information could be helpful in understanding the literature.
2. Students should take quizzes on assigned readings.
3. Students should keep a journal in which they record their responses to assigned readings and class discussions.
4. Students should learn to place the major assigned writers and texts on an historical time line.
5. Students should satisfactorily read at least one poem or passage aloud, either in class or in the instructor's office.
6. Instructors should welcome and support the diverse identities, backgrounds, and academic experience of our students as essential foundations for college community.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for ENG 235

ENG236 - American Autobiography

Overview

Subject
English

Academic Department
English

School
Liberal Arts

Course Description
Focuses on reading, discussion, and written analysis of published autobiographies, memoirs, personal essays, journals and/or diaries by Americans who have significantly influenced the social, cultural, and political composition of America.

Course Pre-requisite(s)
ENG131 Introduction College Writing with a C grade or better (Note: A C- grade is not transferable and is not accepted by some programs at HFC)

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
10

Academic Level
Undergraduate

General Education Category
Humanities and Fine Arts

Michigan Transfer Agreement (MTA) Category
Category 5: Humanities and Fine Arts - Applied Degrees, Category 5: Humanities and Fine Arts - Transfer Degrees

Goals, Topics, and Objectives

Core Course Topics

1. Introduction to literary terms and methods of discussing literature.
2. Introduction to the autobiography and related genres.
3. The autobiography as a representation of American life.
4. Reading a selection of autobiographical texts representing the diverse populations and culures that compose American society.

Formulate an interpretive thesis (as opposed to one which merely reports something factual about a literary text).
Compose an essay which either analyzes a literary text, for example by focusing on literary elements such as theme, character, setting, point of view, plot, imagery, metaphor, symbolism, etc., or analyzes the characteristic themes, features, and / or techniques of a given writer's works, or analyzes more than one literary text by comparing and contrasting works by more than one writer.
Identify a range of key terms that are essential to an introductory-level understanding of literature, particularly autobiographical literature.
Explain how the autobiography evolved over time, from the narrative to the memoir.
Explain the importance and /or distinctive achievement of key writers of autobiographical literature.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
General:

Assessment may include (but need not be limited to) quizzes, class participation, essays, and exams. But assessment must include a minimum of 2,000 words of formal literary analysis.

Specific:

1. Students will write at least one out-of-class essay of literary analysis that is at least 1,200 words in length.
2. Students will take at least one written exam which requires them to analyze literature; whether a single essay or multiple shorter responses, this expository component will count for at least half of the credit for that exam.

General Course Requirements and Recommendations
Required:

1. Students will read substantial and representative autobiographical selections from at least five influential figures in American society, such as Maya Angelou, James Baldwin, Mouroud Barghouti, William Bradford, Annie Dillard, Frederick Douglass, W.E.B. DuBois, Ralph Waldo Emerson, Benjamin Franklin, Harriet Jacobs, Thomas Jefferson, Maxine Hong Kingston, Thomas Paine, Sylvia Plath, Mary Rowlandson, Samuel Sewell, Era Bell Thompson, Henry David Thoreau, John Updike, Booker T. Washington, and Richard Wright.
2. Students will read a substantial and representative selection of literary texts that explore themes such as gender, social, economic, and political circumstances of two or more racial, ethnic, or religious groups that compose American society.
3. Students will regularly engage in thoughtful discussion of the assigned readings.
4. Students will study (through assigned readings and /or classroom discussion) the cultural contexts from which the literature emerges.
5. Students will study concepts that are essential to an introductory-level understanding of autobiographical literature, such as allegory, anecdote, antagonist/protagonist, biographical experience, captivity narrative, character, conflict, connotation, cultural studies, denotation, dialogue, diary, epistolary, fiction first-person narrator, gender criticism, genre, historical criticism, ideology, image, intiation story, irony, journal, memoir, motif, narrator, nio-fiction novel, oral tradition, plot, satire, style, setting, symbol, theme, third-person narrator, and tone.

Recommended:

1. Students should learn appropriate biographical information about assigned writers when such information could be helpful in understanding the literature.
2. Students should take quizzes on assigned readings.
3. Students should keep a journal in which they record their responses to assigned readings and class discussions.
4. Students should learn to place the major assigned writers and texts on an historical time line.
5. Students should satisfactorily read at least one passage aloud, either in class or in the instructor's office.
6. Instructors should welcome and support the diverse identities, backgrounds, and academic experience of our students as essential foundations for college community.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for ENG 236

ENG237 - American Literature Since 1900

Overview

Subject
English

Academic Department
English

School
Liberal Arts

Course Description
Focuses on reading, discussion, and written analysis of American literature since 1900 in order to understand its meaning and its relation to the development of American thought and tradition. Themes include alienation, materialism, race relations, identity, conformity/rebellion, technology, environment, and war.

Course Pre-requisite(s)
ENG131 Introduction College Writing with a C grade or better (Note: A C- grade is not transferable and is not accepted by some programs at HFC)

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
10

Academic Level
Undergraduate

General Education Category
Humanities and Fine Arts

Michigan Transfer Agreement (MTA) Category
Category 5: Humanities and Fine Arts - Applied Degrees, Category 5: Humanities and Fine Arts - Transfer Degrees

Goals, Topics, and Objectives

Core Course Topics

1. Introduction to literary terms and methods of discussing literature.
2. Modern American fiction before 1945.
3. Modern American poetry before 1945.
4. Modern American drama.
5. American prose since 1945.
6. American poetry since 1945.

Formulate an interpretive thesis (as opposed to one which merely reports something factual about a literary text).
Compose an essay which either analyzes a literary text, for example by focusing on literary elements such as theme, character, setting, point of view, plot, imagery, metaphor, symbolism, etc., or analyzes the characteristic themes, features, and / or techniques of a given writer's works, or analyzes more than one literary text by comparing and contrasting works by more than one American writer of this period.
Identify some of the key literary terms that are essential to an introductory-level understanding of American literature since 1900.
Identify features in a given text that would commonly be considered typical of American literature since 1900. These features might include 1) literary experimentation, such as stream-of consciousness, use of multiple narrators, open-endedness, fragmentary structure, self-referentiality, mixture of high and low culture, etc.; and 2) political positions such as feminism, internationalism, multiculturalism, social protest, etc.
Explain the crucial importance and /or distinctive achievement of some of the key American poets, playwrights, and prose writers since 1900.
Identify and analyze principal works and passages reflecting some of the following pivotal themes: alienation, rural vs. urban life, materialism, race relations, identity, conformity/rebellion, technology, environment, and war.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
General:

Assessment may include (but need not be limited to) quizzes, class participation, essays, and exams. But assessment must include a minimum of 2,000 words of formal literary analysis.

Specific:

1. Students will write at least one out-of-class essay of literary analysis that is at least 1,200 words in length.
2. Students will take at least one written exam which requires them to analyze literature; whether a single essay or multiple shorter responses, this expository component will count for at least half of the credit for that exam.

General Course Requirements and Recommendations
Required:

1. Students will read substantial and representative selections from key American poets, playwrights, and prose writers since 1900, such as Theodore Dreiser, F. Scott Fitzgerald, William Faulkner, Arthur Miller, Tennessee Williams, Ralph Ellison, James Baldwin, Flannery O'Connor, Kurt Vonnegut, Saul Bellow, David Mamet, Louise Erdrich, Toni Morrison, and Sandra Cisneros, Robert Frost, Wallace Stevens, William Carlos Williams, Ezra Pound, T. S, Eliot, Langston Hughes, e. e. cummings, Gwendolyn Brooks, Allen Ginsberg, Robert Penn Warren, John Ashbery, Anne Sexton, Sylvia Plath, Gary Snyder, and Robert Pinsky.
2. Students will read a substantial and representative selection of literary texts that explore the following key themes: alienation, rural vs. urban life, materialism, race relations, identity, conformity/rebellion, technology, environment, and war.
3. Students will regularly engage in thoughtful discussion of the assigned readings.
4. Students will study (through assigned readings and / or classroom discussion) the cultural contexts from which the literature emerges.
5. Students will study concepts that are essential to an introductory-level understanding of American literature since 1900, such as character, conflict, plot, setting, theme, symbol, point of view, metaphor, rhyme, meter, allusion, irony, autobiography, essay, short story, novel, lyric poetry, realism, naturalism, Imagism, the Lost Generation, modernism, the Harlem Renaissance, the absurd, the Beats, postmodernism, the antihero, and multiculturalism.

Recommended:

1. Students should learn appropriate biographical information about assigned writers when such information could be helpful in understanding the literature.
2. Students should take quizzes on assigned readings.
3. Students should keep a journal in which they record their responses to assigned readings and class discussions.
4. Students should learn to place the major assigned writers and texts on an historical time line.
5. Students should satisfactorily read at least one poem or passage aloud, either in class or in the instructor's office.
6. Instructors should welcome and support the diverse identities, backgrounds, and academic experience of our students as essential foundations for college community.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for ENG 237

ENG241 - Shakespeare

Overview

Subject
English

Academic Department
English

School
Liberal Arts

Course Description
Focuses on reading, discussion, and written analysis of six to eight of William Shakespeare's comedies, histories, and tragedies. Readings can also include Shakespeare's non-dramatic poetry. Students also have the opportunity to observe, analyze, and evaluate his works in performance, either live or recorded.

Course Pre-requisite(s)
ENG131 Introduction College Writing with a C grade or better (Note: A "C-" grade is not transferable and is not accepted by some programs at HFC.)

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
10

Academic Level
Undergraduate

General Education Category
Humanities and Fine Arts

Michigan Transfer Agreement (MTA) Category
Category 5: Humanities and Fine Arts - Applied Degrees, Category 5: Humanities and Fine Arts - Transfer Degrees

Goals, Topics, and Objectives

Core Course Topics

1. Introduction to literary terms and methods of discussing literature.
2. A brief history of Renaissance England and the English language.
3. Introduction to Shakespeare's stage.
4. Analysis and discussion of various plays by Shakespeare, including discussion of the genres (tragedies, comedies, and histories). Plays may be addressed chronologically or grouped by genre.
5. Introduction to Shakespeare's sonnets.

Formulate an interpretive thesis (as opposed to one which merely reports something factual about a literary text).
Compose an essay which either analyzes a Shakespearean text, for example by focusing on literary elements such as theme, character, setting, point of view, plot, imagery, metaphor, symbolism, etc., or analyzes the characteristic themes, features, and / or techniques of Shakespeare's works, or analyzes more than one Shakespearean text by comparing and contrasting them.
Identify some of the key literary terms that are essential to an introductory-level understanding of Shakespeare and English Renaissance literature.
Identify features in a given text that would commonly be considered typical of Shakespeare and English Renaissance literature..
Evaluate some political or artistic goals of Shakespeare's plays.
Explain Shakespeare's work in a historical or literary context.
Identify and analyze principal works and passages reflecting some of the Shakespeare's pivotal themes.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
General:

Assessment may include (but need not be limited to) quizzes, class participation, essays, and exams. But assessment must include a minimum of 2,000 words of formal literary analysis.

Specific:

1. Students will write at least one out-of-class essay of literary analysis that is at least 1,200 words in length.
2. Students will take at least one written exam which requires them to analyze literature; whether a single essay or multiple shorter responses, this expository component will count for at least half of the credit for that exam.

General Course Requirements and Recommendations
Required:

1. Students will read substantial and representative selections from the works of Shakespeare.
2. Students will read a substantial and representative selection of Shakespearean texts that explore many of Shakespeare's recurring themes, such as revenge, kingship, gender roles, social order and disorder, treatment of outsiders, ambition, human frailty, death, regeneration, mutability, the power and limitations of language, beauty, art/artifice, and nature.
3. Students will regularly engage in thoughtful discussion of the assigned readings.
4. Students will study (through assigned readings and / or classroom discussion) the cultural contexts from which the literature emerges.
5. Students will study concepts that are essential to an introductory-level understanding of Shakespeare, including such things as character, conflict, setting, theme, symbol, point of view, metaphor, rhyme, meter, allusion, irony, comedy, tragedy, history, romantic comedy, sonnet, conceit, iambic pentameter, soliloquy, groundlings, plot, conflict, climax, resolution, exposition, protagonist, antagonist, foreshadowing, and catharsis.

Recommended:

1. Students should learn appropriate biographical information about assigned writers when such information could be helpful in understanding the literature.
2. Students should take quizzes on assigned readings.
3. Students should keep a journal in which they record their responses to assigned readings and class discussions.
4. Students should learn to place the major assigned texts on an historical time line.
5. Students should satisfactorily read at least one poem or scene aloud, either in class or in the instructor's office.
6. Instructors should welcome and support the diverse identities, backgrounds, and academic experience of our students as essential foundations for college community.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for ENG 241

ENG243 - Women's Literature

Overview

Subject
English

Academic Department
English

School
Liberal Arts

Course Description
Focuses on the reading, discussion, and written analysis of literature by (or perhaps about) women from the Middle Ages to the present. The materials include drama, poetry, novels, short stories, diaries, memoirs, letters, and essays. Students will have the opportunity to explore 1) the interaction of dominant and marginal cultures as reflected in literature and 2) the relationship of the students' own experiences to other women's lives as portrayed in literature.

Course Pre-requisite(s)
ENG131 Introduction College Writing with a C grade or better (Note: A "C-" grade is not transferable and is not accepted by some programs at HFC.)

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
15

Academic Level
Undergraduate

General Education Category
Humanities and Fine Arts

Michigan Transfer Agreement (MTA) Category
Category 5: Humanities and Fine Arts - Applied Degrees, Category 5: Humanities and Fine Arts - Transfer Degrees

Goals, Topics, and Objectives

Core Course Topics

1. Introduction to literary terms and methods of discussing literature.
2. Introduction to literary movements and historical eras.
3. Introduction to feminism and feminist criticism.
4. Introduction to concepts of genre, publication, and authorship.
5. Introduction to aesthetic and cultural dimensions of women's literature.
6. Reading a wide and representative selection of women's literature.

Formulate an interpretive thesis (as opposed to one which merely reports something factual about a literary text).
Compose an essay which either analyzes a literary text, for example by focusing on literary elements such as theme, character, setting, point of view, plot, imagery, metaphor, symbolism, etc., or analyzes the characteristic themes, features, and / or techniques of a given writer's works, or analyzes more than one literary text by comparing and contrasting works by more than one woman writer from a different historical period, social class, or race.
Identify a range of key literary terms that are essential to an introductory-level understanding of literature by women.
Explain the crucial importance and/or distinctive achievement of some of the key women writers.
Identify and analyze principal works and passages reflecting some of the key themes reflected in literature by women.
Discuss the specific and peculiar functions of some of the literary genres as employed by women writers.
Practice methods of literary criticism and cultural theory within the study of women's literature.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
General: Assessment may include (but need not be limited to) quizzes, class participation, essays, and exams. But assessment must include a minimum of 2,000 words of formal literary analysis.

Specific:

1. Students will write at least one out-of-class essay of literary analysis that is at least 1,200 words in length.
2. Students will take at least one written exam which requires them to analyze literature; whether a single essay or multiple shorter responses, this expository component will count for at least half of the credit for that exam.

General Course Requirements and Recommendations
Required

1. Students will read substantial and representative selections of literature from various genres by women from the Middle Ages to the present.
2. Students will read a substantial and representative selection of literary texts that explore the following themes: femininity, feminism, gender roles, the Eve/Mary dichotomy, the cult of the Virgin, the cult of domesticity, the *femme fatale*, madness, marriage, women's suffrage, sexual orientation, oppression, conformity/rebellion, and marginalization.
3. Students will regularly engage in thoughtful discussion of the assigned readings.
4. Students will study (through assigned readings and / or classroom discussion) the cultural contexts from which the literature emerges.
5. Students will study concepts that are essential to an introductory-level understanding of literature by women writers, such as character, conflict, plot, setting, theme, symbol, point of view, metaphor, rhyme, meter, allusion, irony, autobiography, essay, short story, novel, lyric poetry, journal, diary, memoir, and epistle.

Recommended:

1. Students should learn appropriate biographical information about assigned writers when such information could be helpful in understanding the literature.
2. Students should take quizzes on assigned readings.
3. Students should keep a journal in which they record their responses to assigned readings and class discussions.
4. Students should learn to place the major assigned writers and texts on an historical time line.
5. Students should satisfactorily read at least one poem or passage aloud, either in class or in the instructor's office.
6. Instructors should welcome and support the diverse identities, backgrounds, and academic experience of our students as essential foundations for college community.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for ENG 243

ENG245 - The Bible as Literature

Overview

Subject
English

Academic Department
English

School
Liberal Arts

Course Description
Focuses on reading, discussion, and written analysis of major literary selections from the Hebrew and Christian bibles. The Bible will be studied not as a religious document but as literary text and a source of ideas and styles reflected in various works of world literature.

Course Pre-requisite(s)
ENG131 Introduction College Writing with a C grade or better (Note: A "C-" grade is not transferable and is not accepted by some programs at HFC.)

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
10

Academic Level
Undergraduate

General Education Category
Humanities and Fine Arts

Michigan Transfer Agreement (MTA) Category
Category 5: Humanities and Fine Arts - Applied Degrees, Category 5: Humanities and Fine Arts - Transfer Degrees

Goals, Topics, and Objectives

Core Course Topics

1. Introduction to literary terms and methods of discussing literature.
2. Biblical allusion and the influence of the Hebrew and Christian bibles on world literature.
3. The Hebrew bible

   a. Genesis, Gilgamesh; b. Exodus, Numbers, Deuteronomy; c. Psalms, Song of Songs; d. Joshua, Judges, Samuel, Kings; e. Ecclesiastes, Proverbs; f. Jeremiah, Ezekiel, Isaiah, Daniel; g. Jonah, Ruth, Esther; h. Job.
4. The Christian bible

   a. The four Gospels, b. The letters of Paul, c. The Book of Revelations.

Formulate an interpretive thesis (as opposed to one which merely reports something factual about a biblical text).
Compose an essay which either analyzes a biblical text, for example by focusing on literary elements such as theme, character, setting, point of view, plot, imagery, metaphor, symbolism, etc., or analyzes the characteristic themes, features, and / or techniques of a given biblical writer's works, or analyzes more than one biblical text text by comparing and contrasting them.
Identify major figures, settings, and artistic devices of the Hebrew and Christian bibles .
Explain the history of canon formation, textual scholarship, translation into English, and interpretation of the Hebrew and Christian bibles.
Analyze the impact of the Hebrew and Christian bibles on world literature, history, and culture.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
General:

Assessment may include (but need not be limited to) quizzes, class participation, essays, and exams. But assessment must include a minimum of 2,000 words of formal literary analysis.

Specific:

1. Students will write at least one out-of-class essay of literary analysis that is at least 1,200 words in length.
2. Students will take at least one written exam which requires them to analyze literature; whether a single essay or multiple shorter responses, this expository component will count for at least half of the credit for that exam.

General Course Requirements and Recommendations
Required:

1. Students will read substantial and representative selections from the Hebrew and Christian bibles.
2. Students will read a substantial and representative selection of biblical passages that explore themes such as good, evil, love, war, family, wisdom, sex, death, faith, despair, power, justice, success, knowledge, deception, beauty, gender, ethnicity, race, and class.
3. Students will read at least three literary passages that centrally employ a biblical allusion.
4. Students will regularly engage in thoughtful discussion of the assigned readings.
5. Students will study terms that are essential to an introductory-level understanding of biblical literature, such as testament, literature, genre, myth, allusion, epic, plot, character, setting, theme, allegory, simile, metaphor, irony, proverb, prophecy, dramatic narrative, epistle, parable, midrash, apocalypse, millennium, exegesis, Pentateuch, Apocyrpha, Synoptics, and Wisdom.
6. Students will study (through assigned readings and/or classroom discussion) the cultural contexts from which biblical literature emerges.

Recommended:

1. Students should learn appropriate information about methods for determining the authorship of various biblical texts.
2. Students should take quizzes on assigned readings.
3. Students should keep a journal in which they record their responses to assigned readings and class discussions.
4. Students should learn to place the major assigned writers and texts on an historical time line.
5. Students should satisfactorily read at least one biblical passage aloud, either in class or in the instructor's office.
6. Instructors should welcome and support the diverse identities, backgrounds, and academic experience of our students as essential foundations for college community.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for ENG 245

ENG246 - Introduction to Children's Literature

Overview

Subject
English

Academic Department
English

School
Liberal Arts

Course Description
Introduces the forms, themes, history, and uses of literature written for children ages three to twelve. Students learn to evaluate and select literature critically and understand its use in preschool, elementary, and middle school classrooms. Genres to be studied include traditional fiction/folktales, contemporary realistic fiction, picture books, fantasy/science fiction, historical fiction, biography, nonfiction, and poetry/verse.

Course Pre-requisite(s)
ENG132 College Writing and Research with a C grade or better (Note: A C- grade is not transferable and is not accepted by some programs at HFC.)

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
10

Academic Level
Undergraduate

General Education Category
Humanities and Fine Arts

Michigan Transfer Agreement (MTA) Category
Category 5: Humanities and Fine Arts - Applied Degrees, Category 5: Humanities and Fine Arts - Transfer Degrees

Goals, Topics, and Objectives

Core Course Topics

1. Introduction to literary terms and methods of discussing literature.
2. The social construction of childhood and the history of children's literature.
3. Traditional literature: folk tales, myths, legends, fables, and fairy tales.
4. Picture books.
5. Poetry and verse.
6. Contemporary realism.
7. Fantasy / science fiction.
8. Historical fiction.
9. Nonfiction: biography / autobiography, history, travel, and science.

Formulate an interpretive thesis (as opposed to one which merely reports something factual about a literary text).

Compose an essay which either analyzes a literary text, for example by focusing on literary elements such as theme, character, setting, point of view, plot, imagery, metaphor, symbolism, etc., or analyzes the characteristic themes, features, and / or techniques of a given writer's works, or analyzes more than one literary text by comparing and contrasting works by more than one children's writer.

Identify some of the key literary terms that are essential to an introductory-level understanding of children's literature.

Estimate the reading level of a given text by considering the appropriateness of the content and the complexity of the language.

Explain a few of the key ways in which children's writers have attempted to balance didacticism and pleasure.

Explain the crucial importance and /or distinctive achievement of some key writers in the history of children's literature.

Identify and analyze principal works and passages reflecting some of the pivotal topics in children's literature.

Explain the ways in which a children's book may be censored and / or explain some of the common arguments for and against the censorship of children's books.

Locate and employ professional reviews and / or literary criticism about children's literature.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
General:

Assessment may include (but need not be limited to) quizzes, class participation, essays, and exams. But assessment must include a minimum of 2,000 words of formal literary analysis.

Specific:

1. Students will write at least one out-of-class essay of literary analysis that is at least 1,200 words in length.
2. Students will take at least one written exam which requires them to analyze literature; whether a single essay or multiple shorter responses, this expository component will count for at least half of the credit for that exam.

General Course Requirements and Recommendations
Required:

1. Students will read substantial or representative selections from the works of at least five writers recognized as having made important contributions to the field of children's literature.
2. Students will read a substantial or representative selection of literary texts that explore the topics of peer relations, family relations, personal loss (through death, divorce, etc.), overcoming obstacles, and social difference (race / ethnicity, class, gender, and disability).
3. Students will regularly engage in thoughtful discussion of the assigned readings.
4. Students will study (through assigned readings and / or classroom discussion) the cultural and historical contexts from which the literature emerges.
5. Students will study concepts that are essential to an introductory-level understanding of children's literature, such as character, setting, perspective, metaphor, tone, theme, style, structure, layout (in picture books), rhyme, rhythm, image, censorship, human development (cognitive and/or moral), picture book, chapter book, realistic fiction, fantasy, historical fiction, verse, nursery rhyme, folktale, fairytale, fable, myth, and didacticism.

Recommended:

1. Students should learn appropriate biographical information about assigned writers when such information could be helpful in understanding the literature.
2. Students should take quizzes on assigned readings.
3. Students should keep a journal in which they record their responses to assigned readings and class discussions.
4. Students should learn to place the major assigned writers and texts on an historical timeline.
5. Students should satisfactorily read at least one poem or passage aloud, either in class or in the instructor's office.
6. Instructors should welcome and support the diverse identities, backgrounds, and academic experience of our students as essential foundations for college community.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for ENG 246

ENG248 - African American Literature

Overview

Subject
English

Academic Department
English

School
Liberal Arts

Course Description
Focuses on reading, discussion, and written analysis of African American Literature from its eighteenth-century beginnings to the modern era, emphasizing representative texts in all genres, including poetry, slave narrative, fiction, essay, and drama.

Course Pre-requisite(s)
ENG131 Introduction College Writing with a C grade or better (Note: A "C-" grade is not transferable and is not accepted by some programs at HFC.)

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
10

Academic Level
Undergraduate

General Education Category
Humanities and Fine Arts

Michigan Transfer Agreement (MTA) Category
Category 5: Humanities and Fine Arts - Applied Degrees, Category 5: Humanities and Fine Arts - Transfer Degrees

Goals, Topics, and Objectives

Core Course Topics

1. Introduction to literary terms and methods of discussing literature.
2. The Vernacular Tradition: spirituals; secular songs, ballads, and rhymes; gospel; folk tales; sermons; blues; jazz; and rap.
3. Slave Narrative/Antebellum writing: Phillis Wheatley, David Walker, Olaudah Equiano, Frederick Douglass, William Wells Brown, Harriet Jacobs, and Harriet Wilson.
4. Reconstruction/Post-Reconstruction literature: Booker T. Washington, Charles Chesnutt, Pauline Hopkins, W. E. B. DuBois, and Paul Laurence Dunbar.
5. Harlem Renaissance literature: Alain Locke, Claude McKay, Zora Neale Hurston, Langston Hughes, Nella Larsen, Jean Toomer, and Countee Cullen.
6. Realism, Naturalism, and Modernism: Richard Wright, Ann Petry, Ralph Ellison, Gwendolyn Brooks, James Baldwin, and Lorraine Hansberry.
7. The Black Arts Movement: Malcolm X, Martin Luther King, Amiri Baraka, Sonia Sanchez, Haki Madhubuti, and Nikki Giovanni.
8. Literature since 1970: Maya Angelou, Toni Morrison, Ernest Gaines, Ishmael Reed, John Edgar Wideman, Alice Walker, August Wilson, Gloria Naylor, Rita Dove, and Walter Mosley.

Formulate an interpretive thesis (as opposed to one which merely reports something factual about a literary text).
Compose an essay which either analyzes a literary text, for example by focusing on literary elements such as theme, character, setting, point of view, plot, imagery, metaphor, symbolism, etc., or analyzes the characteristic themes, features, and / or techniques of a given writer's works, or analyzes more than one literary text by comparing and contrasting works by more than one writer of the period or genre named in the course title.
Identify some of the key literary terms essential to an introductory-level understanding of the African American vernacular and literary traditions.
Identify features in a given text that would be considered typical of the African American vernacular and literary traditions.
Evaluate a few of the key ways African American writers have employed literature in the quest for black humanity, freedom, and literacy in the eighteenth and nineteenth centuries and for social equality, civil rights, integration, and educational / economic opportunity in the twentieth and twenty-first centuries.
Explain the crucial importance and /or distinctive achievement of major African American authors.
Identify and analyze principal works and passages reflecting some of the pivotal themes in African American literature.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
General:

Assessment may include (but need not be limited to) quizzes, class participation, essays, and exams. But assessment must include a minimum of 2,000 words of formal literary analysis.

Specific:

1. Students will write at least one out-of-class essay of literary analysis that is at least 1,200 words in length.
2. Students will take at least one written exam which requires them to analyze literature; whether a single essay or multiple shorter responses, this expository component will count for at least half of the credit for that exam.

General Course Requirements and Recommendations
Required:

1. Students will read substantial and representative selections from the works of Phillis Wheatley, Frederick Douglass, W. E. B. DuBois, Langston Hughes, Zora Neale Hurston, Richard Wright, Ralph Ellison, James Baldwin, Lorraine Hansberry, Gwendolyn Brooks, Toni Morrison, Alice Walker, Ernest Gaines, and Walter Mosley.
2. Students will read a substantial and representative selection of texts in the African American literary tradition that explore many of the following themes: the quests for humanity, freedom, literacy, social integration, and civil rights; racial uplift during Jim Crow era; quest for the American Dream / economic inclusion; importance of the black extended/surrogate family; significance of domestic sphere/female bond in black women's experience; sexual exploitation and victimization; effects of migration/urbanization; resistance to black male invisibility and emasculation; effects Western aesthetic on black psyche; reversals of racist mythology.
3. Students will regularly engage in thoughtful discussion of the assigned readings.
4. Students will study (through assigned readings and / or classroom discussion) the cultural contexts from which the literature emerges.
5. Students will study concepts that are essential to an introductory-level understanding of African American literature, including literary elements such as characterization, plot, setting, theme, symbolism, allusion, figurative language; vernacular and literary genres such as gospel, blues, folk tales, ballads, autobiography, short story, essay, drama, novel, literary criticism, and poetic forms; and literary movements such as romanticism, realism, naturalism, modernism, and black nationalism.

Recommended:

1. Students should learn appropriate biographical information about assigned writers when such information could be helpful in understanding the literature.
2. Students should take quizzes on assigned readings.
3. Students should keep a journal in which they record their responses to assigned readings and class discussions.
4. Students should learn to place the major assigned writers and texts on an historical time line.
5. Students should satisfactorily read at least one poem or passage aloud, either in class or in the instructor's office.
6. Instructors should welcome and support the diverse identities, backgrounds, and academic experience of our students as essential foundations for college community.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for ENG 248

ENGR121 - Engineering Design and 3D Printing

Overview

Subject
Pre-Engineering

Academic Department
Pre-Engineering

School
Science, Tech, Engr & Math

Course Description
This course provides an introduction to the basic principles of engineering design, computer aided design (CAD) and additive manufacturing, with a focus on creating new designs to solve engineering problems using 3D printing technologies. Students will use industry standard 3D modeling software to create virtual prototypes of mechanical assemblies and gain hands-on experience with 3D printing through laboratory experiments and group design projects. Other topics include creating orthographic drawings, auxiliaries, sectioning, conventions, and dimensioning.

Course Pre-requisite(s)
MATH100 Basic Tech Mathematics-level or higher, or high school algebra, or eligible to take gateway MATH courses at HFC.

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
62

Total Student Contact Hours:
62

Course Fee
30

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Introduction to design and 3D printing
    - Define standards and conventions as applied to technical drawings
    - Describe design processes related to problem solving in engineering
    - Identify the standard dimensioning and tolerancing practices for mechanical drawings
    - Describe additive manufacturing processes for building mechanical parts
2. Create 3D objects
    - Create, edit and update sketches in different planes to create 3D objects
    - Create 3D objects in 3D solid modeling environment using methods such as extruding, splitting, etc.
    - Optimize virtual parts (weight, volume and surface finish optimization)
3. Orthographic, section, and auxiliary views of a part
    - Create orthographic drawings from 3D models
        - Apply the concept of cutting plans to create section views and sectioned 3D CAD models
        - Apply section theory to computer models when designing
        - Create auxiliary drawings from 3D models
4. 3D printing
    - Export 3D designed files from 3D modeling environment for 3D printing
    - Adjust the infill density and printing accuracy to minimize the filament cost
    - Know the major components in DIY (Do-It-Yourself) 3D printers and be able to calibrate and tune them
    - Operate open-source 3D printers
5. Engineering design process
    - Identify a problem statement for their term project
    - Work in teams to design and 3D print a prototype to address a problem
    - Communicate the project outcomes effectively using visual and written means

Define standards and conventions as applied to technical drawings.

Describe design processes related to problem solving in engineering.

Identify the standard dimensioning and tolerancing practices for mechanical drawings.

Describe additive manufacturing processes for building mechanical parts.

Create, edit and update sketches in different planes to create 3D objects.

Create 3D objects in 3D solid modeling environment using methods such as extruding, splitting, etc.

Optimize virtual parts (weight, volume and surface finish optimization).

Create orthographic drawings from 3D models.

Apply the concept of cutting plans to create section views and sectioned 3D CAD models.

Apply section theory to computer models when designing.

Create auxiliary drawings from 3D models.

Export 3D designed files from 3D modeling environment for 3D printing.

Adjust the infill density and printing accuracy to minimize the filament cost.

Know the major components in DIY (Do-It-Yourself) 3D printers and be able to calibrate and tune them.

Operate open-source 3D printers.

Identify a problem statement for their term project.

Work in teams to design and 3D print a prototype to address a problem.

Communicate the project outcomes effectively using visual and written means.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement

- A series of assignments for 3D object designs in 3D modeling software
- Term project for design and 3D printing to address a real-world problem
- Class presentation and written reports
- Tests

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for ENGR 121

ENGR125 - Introduction Computation for Engineers

Overview

Subject
Pre-Engineering

Academic Department
Pre-Engineering

School
Science, Tech, Engr & Math

Course Description
Use of computational tools, such as Excel, Python, and MATLAB, to solve engineering problems. Topics include data analysis, data visualization, algorithm development, programming, computational analysis, and introductory problem solving in engineering.

Course Pre-requisite(s)
MATH100 Basic Tech Mathematics-level or higher, or high school algebra, or eligible to take gateway MATH courses at HFC.

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
62

Total Student Contact Hours:
62

Course Fee
30

Academic Level
Undergraduate

General Education Category
Computer Technology

Goals, Topics, and Objectives

Core Course Topics

1. Introduction to programming
    - Describe algorithm, sequencing, and order in programming
    - Write programming syntax to solve a stepwise simple problem
    - Recognize common programming errors and develop strategies for debugging code
    - Define types of data, including numeric and strings, and list types of variables
2. Data analysis
    - Describe introductory statistics functions such as frequency, summarizing, relations, and regression lines
    - Write functions in Excel to analyze data such as average, sum, texts from dates, etc.
    - Import datasets to Python and clean the data
    - Create data frame manipulation and summarize the data in Python
    - Build simple machine learning regression models in Python
    - Create and manipulate matrices and vectors in MATLAB
    - Import data to MATLAB, manipulate and summarize data, and export results
    - Write syntax for conditional statements and loops to summarize and categorize data
3. Data visualization
    - Plot 2D data using Excel and select appropriate formatting for charts
    - Write syntax in MATLAB to create 2D and 3D plots
    - Create interactive plots to evaluate data with respect to different categories or changes in inputs
4. Problem solving using numerical methods
    - Set up mathematical equations to find a solution for a simple mechanical/electrical system
    - Apply "goal seek", "what if analysis" and "solver" in Excel to solve a system of mathematical equations
    - Solve problems involving linear equations, root finding, curve fitting, error properties, and numerical precision
    - Create integrated functions in MATLAB to find solutions for mathematical equations
5. Engineering team solutions
    - Work in teams to formulate a complex engineering problem into a system of mathematical equations
    - Create a set of functions in MATLAB to provide a solution for a complex engineering problem
    - Communicate project outcomes effectively using visual and written means

Describe algorithm, sequencing, and order in programming.

Write programming syntax to solve a stepwise simple problem.

Recognize common programming errors and develop strategies for debugging code.

Define types of data, including numeric and strings, and list types of variables.

Describe introductory statistics functions such as frequency, summarizing, relations, and regression lines.

Write functions in Excel to analyze data such as average, sum, texts from dates, etc.

Import datasets to Python and clean the data.

Create data frame manipulation and summarize the data in Python.

Build simple machine learning regression models in Python.

Create and manipulate matrices and vectors in MATLAB.

Import data to MATLAB, manipulate and summarize data, and export results.

Write syntax for conditional statements and loops to summarize and categorize data.

Plot 2D data using Excel and select appropriate formatting for charts.

Write syntax in MATLAB to create 2D and 3D plots.

Create interactive plots to evaluate data with respect to different categories or changes in inputs.

Set up mathematical equations to find a solution for a simple mechanical/electrical system.

Apply "goal seek", "what if analysis" and "solver" in Excel to solve a system of mathematical equations.

Solve problems involving linear equations, root finding, curve fitting, error properties, and numerical precision.

Create integrated functions in MATLAB to find solutions for mathematical equations.

Work in teams to formulate a complex engineering problem into a system of mathematical equations.

Create a set of functions in MATLAB to provide a solution for a complex engineering problem.

Communicate project outcomes effectively using visual and written means.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement

- A series of assignments for manipulation of data in Excel, programming in MATLAB, and reporting
- Term project to find a solution using numerical methods for a real-world problem
- Class presentation and written reports
- Tests

General Course Requirements and Recommendations
For this course to satisfy the Computer Technology General Education Requirement, it is required to cover the following items in addition to the core topics listed above:

- Computer computation capacity (computer processor and required memory for computation), cloud computation, input and output, and storage devices.
- File management tasks in various locations (e.g. cloud and desktop) that include finding (e.g. using search techniques), organizing (e.g. using/creating folder structures on various drives), saving, zipping, and printing files.
- Submission of files through an online course platform, contacting instructors, and attaching files.
- Use of search engines to proficiently locate reliable information on the internet, search internet for instructions on how to debug MATLAB and Python codes.
- Create a term project report (e.g. edit, navigate, copy/paste, find/replace, headers/footers, insert pages, insert illustrations, spell check, tables, lists, etc.), format (e.g. font styles, margins, alignment, etc.), and configure (e.g. print/save to different formats, use templates) a document.
- Create various presentations to illustrate project and lab work outcomes (e.g. slide layouts, adding multimedia, animations, transitions, table/charts, etc.), view (e.g. slide sorter, notes page, etc.) and configure (e.g. print/save to different formats, use templates) a slideshow.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for ENGR 125

ENGR130 - Introduction to Engineering

Overview

Subject
Pre-Engineering

Academic Department
Pre-Engineering

School
Science, Tech, Engr & Math

Course Description
Introduces the engineering profession, problem solving fundamentals, applications, fields of study, career paths, teamwork skills, and ethics necessary in the engineering profession. Course work includes projects that deal with real world application of these aspects of engineering as related to engineering problems.

Course Pre-requisite(s)
MATH100 Basic Tech Mathematics-level or higher, or high school algebra, or eligible to take gateway MATH courses at HFC.

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
20

Academic Level
Undergraduate

General Education Category
Natural Sciences

Michigan Transfer Agreement (MTA) Category
Category 6: Natural Sciences - Applied Degrees, Category 6: Natural Sciences - Transfer Degrees - Lecture Only

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Portfolio Review, Interview

Credit for Prior College Level Learning (CPCLL) Details
Portfolio Review Details

A student may be granted credit for this course through credit for prior college-level learning if s/he had work experience in a manufacturing or engineering environment and has worked with a team in design or manufacturing of prototypes. A portfolio of engineering-related projects showing the contribution of student is required. Student needs to submit a resume, and will be interviewed with an engineering instructor.

Interview Details

A student may be granted credit for this course through credit for prior college-level learning if s/he had work experience in a manufacturing or engineering environment and has worked with a team in design or manufacturing of prototypes. An interview with student is necessary to assess his/her engineering-related experience.

Goals, Topics, and Objectives

Course Goals
The course is intended to introduce the engineering profession to undergraduate students providing a general understanding of what is involved in the field, including problem solving fundamentals, applications, fields of study, career paths, teamwork skills and ethics.

Core Course Topics

1. Engineering majors and career paths
    - Describe the different disciplines of engineering.
    - Differentiate engineering science from engineering technology.
    - List possible career paths that engineers follow.
    - Search for a job and the process to apply.
2. Engineering education pathway
    - Describe a transfer program and a career program.
    - Describe the process to transfer to an engineering program.
3. Engineering ethics and professional engineers
    - Describe the opportunities of Professional Engineering certification.
    - Discuss the importance of making ethical decisions in an engineering career.
4. Engineering problem solving
    - Describe components of a basic electrical circuit.
    - Apply Excel and PowerPoint skills to data analysis and presentation.
    - Be able to find resultant of two vectors using a software or by hand.
    - Sketch a basic part by hand or by software.
5. Dimensions, Units, and Unit Conversion
    - Describe the proper use of units and unit conversion.
6. An overview of trigonometry and vectors
    - Describe the trigonometric ratio of a right triangle.
    - Add two vectors graphically.
7. Engineering Design Process and its application to projects
    - List primary steps of an engineering design process.
    - Search patents and articles online.
    - Write a problem statement for their projects.
    - List design specifications for a basic project.
    - Apply teamwork skills in accomplishing a term project.
    - Apply skills learned in the course to a team-based design project.
    - Communicate project results via oral presentations.

Describe the different disciplines of engineering.

Differentiate engineering science from engineering technology.

List possible career paths that engineers follow.

Search for a job and the process to apply.

Describe a transfer program and a career program.

Describe the process to transfer to an engineering program.

Describe the opportunities of Professional Engineering certification.

Discuss the importance of making ethical decisions in an engineering career.

Describe components of a basic electrical circuit.

Apply Excel and PowerPoint skills to data analysis and presentation.

Be able to find resultant of two vectors using a software or by hand.

Sketch a basic part by hand or by software.

Describe the proper use of units and unit conversion.

Describe the trigonometric ratio of a right triangle.

Add two vectors graphically.

List primary steps of an engineering design process.

Search patents and articles online.

Write a problem statement for their projects.

List design specifications for a basic project.

Apply teamwork skills in accomplishing a term project.

Apply skills learned in the course to a team-based design project.

Communicate project results via oral presentations.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
May include:

1. Pre and post-course assessments and surveys
2. Problem sets
3. Exams
4. Team design project
5. Individual writing projects
6. Individual presentations
7. Group presentations

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for ENGR 130

ENGR201 - Science of Materials

Overview

Subject
Pre-Engineering

Academic Department
Pre-Engineering

School
Science, Tech, Engr & Math

Course Description
An introductory course in engineering materials. Particular emphasis is given to the correlation of material properties and internal structures; structure of materials; stress- strain curves; temperature effects; phase diagrams; ferrous and non-ferrous alloys; ceramics; polymers; composites; electrical, magnetic, and optical properties; corrosion and failure.

Course Pre-requisite(s)
CHEM111 Chem Skills Pre-Professional or CHEM131 Principles of Chemistry or CHEM141 Prin Gen & Inorgan Chem I

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
20

Academic Level
Undergraduate

General Education Category
Natural Sciences

Michigan Transfer Agreement (MTA) Category
Category 6: Natural Sciences - Applied Degrees, Category 6: Natural Sciences - Transfer Degrees - Lecture Only

Goals, Topics, and Objectives

Core Course Topics

1. Introduction to science of materials
    - Describe the concept of process-structure-property relationships.
    - List the major classifications of materials.
2. Atomic structure and interatomic bonding
    - Describe the different types of atomic structures.
    - Categorize bonds as ionic, covalent,or metallic.
    - Explain how the atomic structure and type of bond determines the properties of a material.
3. Structure of Crystalline Solids (metals and ceramics)
    - Describe various basic crystal structures.
    - Explain how the crystal structure affect the densities.
    - Describe crystallographic directions and planes.
4. Defects and Imperfections
    - Describe different types of defects.
    - Identify imperfections such as dislocations and vacancies in metals.
    - Demonstrate imperfections effect the properties of the material.
5. Diffusion mechanisms
    - Describe different types of diffusion.
    - List factors that influence diffusion.
6. Mechanical Properties
    - Apply the modulus of elasticity to graph elastic deformations by incorporating Hooke's Law.
    - Create plots of stress vs. strain diagrams from the measurement of the tensile strength of materials.
    - Describe elastic and plastic deformations.
7. Dislocations, slip, plastic deformation,and creep
    - Explain how dislocations and slip relate to deformations and creep.
    - Explain recovery, recrystallization and grain growth.
8. Fracture and fatigue
    - Apply the principles of fracture mechanics to predict materials probability of fatigue and failure.
    - Describe fracture concepts (e.g. ductility, brittleness, microstructures).
9. Phase Diagrams and phase transformations
    - Interpret phase diagrams of binary and multiphase alloys.
    - Calculate percentages of alloy material at a specific temperatures.
    - Evaluate the different phases and microstructures of ferrous metals from the phase diagrams.
    - Interpret transformation diagrams as it applies to carbon steel.
10. Manufacturing processes
    - Be familiar with common manufacturing processes for metals, ceramics, and polymers; their effects on structure; and their impact on sustainability.
11. Thermal processing of metal alloys
    - Understand how annealing, normalizing, quenching and precipitation hardening effect the hardness of materials.
12. Polymer Structures
    - Understand the mechanisms of polymerization.
13. Corrosion and degradation of Materials
    - Describe the process of degradation of metals and polymers.

Describe the concept of process-structure-property relationships.

List the major classifications of materials.

Describe the different types of atomic structures.

Categorize bonds as ionic, covalent,or metallic.

Explain how the atomic structure and type of bond determines the properties of a material.

Describe various basic crystal structures.

Explain how the crystal structure affect the densities.

Describe crystallographic directions and planes.

Describe different types of defects.

Identify imperfections such as dislocations and vacancies in metals.

Demonstrate imperfections effect the properties of the material.

Describe different types of diffusion.

List factors that influence diffusion.

Apply the modulus of elasticity to graph elastic deformations by incorporating Hooke's Law.

Create plots of stress vs. strain diagrams from the measurement of the tensile strength of materials.

Describe elastic and plastic deformations.

Explain how dislocations and slip relate to deformations and creep.

Explain recovery, recrystallization and grain growth.

Apply the principles of fracture mechanics to predict materials probability of fatigue and failure.

Describe fracture concepts (e.g. ductility, brittleness, microstructures).

Interpret phase diagrams of binary and multiphase alloys.

Calculate percentages of alloy material at a specific temperatures.

Evaluate the different phases and microstructures of ferrous metals from the phase diagrams.

Interpret transformation diagrams as it applies to carbon steel.

Be familiar with common manufacturing processes for metals, ceramics, and polymers; their effects on structure; and their impact on sustainability.

Understand how annealing, normalizing, quenching and precipitation hardening effect the hardness of materials.

Understand the mechanisms of polymerization.

Describe the process of degradation of metals and polymers.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Written assignments, exams, and classroom discussions/presentations.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for ENGR 201

ENGR232 - Statics

Overview

Subject
Pre-Engineering

Academic Department
Pre-Engineering

School
Science, Tech, Engr & Math

Course Description
Basic concepts and principles of statics with applications to Newton's Laws of Motion to engineering problems. Forces, moments, equilibrium, couples, free body diagrams, trusses, frames, internal forces, friction, area and mass moment of inertia.

Course Pre-requisite(s)
MATH180 Calculus 1 with a C grade or better

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
62

Total Student Contact Hours:
62

Course Fee
10

Academic Level
Undergraduate

General Education Category
Mathematics, Natural Sciences

Michigan Transfer Agreement (MTA) Category
Category 3: Mathematics - Applied Degrees, Category 6: Natural Sciences - Transfer Degrees - Lecture Only, Category 6: Natural Sciences - Applied Degrees

Goals, Topics, and Objectives

Core Course Topics

1. General Principles
   - To provide an introduction to the basic quantities and idealizations of mechanics.
   - To review the principles for applying the SI system of units.
2. Force Vectors
   - To express force and position in Cartesian vector form.
   - To introduce the dot product in order to determine the angle between two vectors or the projection of one vector onto another.
3. Equilibrium of a Particle
   - To introduce the concept of the free-body diagram for a particle.
   - To show how to solve particle equilibrium problems using the equations of equilibrium.
4. Force System Resultants
   - To discuss the concept of the moment of a force and show how to calculate it.
   - To provide a method for finding the moment of a force about a specified axis.
   - To define the moment of a couple.
   - To indicate how to reduce a simple distributed loading to a single resultant force.
5. Equilibrium of a Rigid Body
   - To introduce the concept of the free-body diagram for a rigid body.
   - To show how to solve rigid-body equilibrium problems using the equations of equilibrium.
6. Structural Analysis
   - To show how to determine the forces in the members of a truss using the method of joints and the method of sections.
   - To analyze the forces acting on the members of frames and machines composed of pin-connected members.
7. Internal Forces
   - To show how to use the method of sections to determine the internal loadings in a member.
8. Friction
   - To introduce the concept of dry friction and show how to analyze the equilibrium of rigid bodies subjected to this force.
   - To present specific applications of frictional force analysis on wedges and belts.
9. Center of Gravity and Centroid
   - To discuss the concept of the center of gravity, center of mass, and the centroid.
   - To show how to determine the location of the center of gravity and centroid for a system of composite shapes.
10. Moments of Inertia
    - To develop a method for determining the moment of inertia for an area.
    - To introduce the product of inertia and show how to determine the maximum and minimum moments of inertia for an area.

To provide an introduction to the basic quantities and idealizations of mechanics.

To review the principles for applying the SI system of units.

To express force and position in Cartesian vector form.

To introduce the dot product in order to determine the angle between two vectors or the projection of one vector onto another.

To introduce the concept of the free-body diagram for a particle.

To show how to solve particle equilibrium problems using the equations of equilibrium.

To discuss the concept of the moment of a force and show how to calculate it.

To provide a method for finding the moment of a force about a specified axis.

To define the moment of a couple.

To indicate how to reduce a simple distributed loading to a single resultant force.

To introduce the concept of the free-body diagram for a rigid body.

To show how to solve rigid-body equilibrium problems using the equations of equilibrium.

To show how to determine the forces in the members of a truss using the method of joints and the method of sections.

To analyze the forces acting on the members of frames and machines composed of pin-connected members.

To show how to use the method of sections to determine the internal loadings in a member.

To introduce the concept of dry friction and show how to analyze the equilibrium of rigid bodies subjected to this force.

To present specific applications of frictional force analysis on wedges and belts.

To discuss the concept of the center of gravity, center of mass, and the centroid.

To show how to determine the location of the center of gravity and centroid for a system of composite shapes.

To develop a method for determining the moment of inertia for an area.

To introduce the product of inertia and show how to determine the maximum and minimum moments of inertia for an area.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
1- Set of homework problems
2- Tests (at least two tests)
3- Projects

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for ENGR 232

ENGR235 - Mechanics of Materials

Overview

Subject
Pre-Engineering

Academic Department
Pre-Engineering

School
Science, Tech, Engr & Math

Course Description
An introduction to stress analyses with emphasis on both mechanics fundamentals and design applications. Elastic relationships between external forces acting on deformable bodies and the associated stresses and deformations; structural members subjected to axial load, torsion, and bending; and combined stresses.

Course Co-requisite(s)
ENGR232 Statics

Credit Hours
2

Total Contact Hours
Total Instructor Contact Hours:
32

Total Student Contact Hours:
32

Course Fee
20

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Moment of Inertia
    - Calculate Moments of Inertia for Areas
    - Apply Parallel-Axis Theorem for an Area
    - Find Moments of Inertia for Composite Areas
2. Stress and Strain
    - Define Stress and Strain
    - Calculate Average Normal Stress in an Axially Loaded Bar
    - Calculate Average Shear Stress
3. Mechanical Properties of Materials
    - Explain the Stress—Strain Diagram
    - Differentiate Stress—Strain Behavior of Ductile and Brittle Materials
    - Describe and Apply Poisson's Ratio
4. Axial Load
    - Describe Elastic Deformation of an Axially Loaded Member
    - Solve Statically Indeterminate Axially Loaded Members
5. Torsion
    - Calculate Torsional Deformation of a Circular Shaft and Angle of Twist
    - Solve Statically Indeterminate Torque-Loaded Members
6. Beam Bending
    - Draw Shear and Moment Diagrams
    - Use Graphical Method for Constructing Shear and Moment Diagrams
    - Find Transverse Shear in Straight Members
    - Find Deflection of Beams Using Slope and Displacement by Integration
7. Combined Loading
    - Explain Method for Designing Thin-Walled Pressure Vessels
    - Explain the State of Stress Caused by Combined Loadings
8. Stress and Strain Transformation
    - List General Equations of Plane-Stress Transformation
    - Explain Principal Stresses and Maximum In-Plane Shear Stress
    - Understand Mohr's Circle–Plane Stress
    - List General Equations of Plane-Strain Transformation

Calculate Moments of Inertia for Areas

Apply Parallel-Axis Theorem for an Area

Find Moments of Inertia for Composite Areas

Define Stress and Strain

Calculate Average Normal Stress in an Axially Loaded Bar

Calculate Average Shear Stress

Explain the Stress—Strain Diagram

Differentiate Stress—Strain Behavior of Ductile and Brittle Materials

Describe and Apply Poisson's Ratio

Describe Elastic Deformation of an Axially Loaded Member

Solve Statically Indeterminate Axially Loaded Members

Calculate Torsional Deformation of a Circular Shaft and Angle of Twist

Solve Statically Indeterminate Torque-Loaded Members

Draw Shear and Moment Diagrams

Use Graphical Method for Constructing Shear and Moment Diagrams

Find Transverse Shear in Straight Members

Find Deflection of Beams Using Slope and Displacement by Integration

Explain Method for Designing Thin-Walled Pressure Vessels

Explain the State of Stress Caused by Combined Loadings

List General Equations of Plane-Stress Transformation

Explain Principal Stresses and Maximum In-Plane Shear Stress

Understand Mohr's Circle–Plane Stress

List General Equations of Plane-Strain Transformation

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
1- Set of homework problems
2- Tests (at least two tests)
3- Projects

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for ENGR 235

ENGR240 - Circuits

Overview

Subject
Pre-Engineering

Academic Department
Pre-Engineering

School
Science, Tech, Engr & Math

Course Description
Intended for students planning to pursue an electrical engineering or biomedical engineering concentration. Topics covered include: Voltage, Current, Power, Resistance, Ohm's law, Kirchhoff's laws, Independent and Dependent Sources, Voltage Divider, Current Divider, Delta-Wye and Wye-Delta Transformations, Nodal and Mesh Analysis, Source Transformation, Thevenin and Norton Theorems, Maximum Power Transfer, Operational Amplifier Analysis, Inductance and Capacitance, Natural Response and Step Response of 1st and 2nd Order Systems, Sinusoidal Steady-State Analysis, Phasors. This course will incorporate a lab utilizing circuit components, breadboard, multimeter, oscilloscope, and function generator. Labs will also incorporate the use of an industry standard circuit simulation software package.

Course Pre-requisite(s)
MATH183 Calculus II with a grade of C or better

Course Co-requisite(s)
PHYS232 Engineering Physics II

Credit Hours
5

Total Contact Hours
Total Instructor Contact Hours:
77

Total Student Contact Hours:
77

Course Fee
15

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Circuit Variables
    - Voltage
    - Current
    - Ideal basic element
    - Power
    - Energy
2. Circuit Elements
    - Voltage and current sources
    - Resistance
    - Circuit model
    - Kirchoff's laws
    - Dependent sources
3. Simple Resistive Circuits
    - Resistors in series, parallel
    - Voltage-divider
    - Current divider
    - Wheatstone bridge
    - Delta-wye and wye-delta transformation
4. Techniques of Circuit Analysis
    - Nodal analysis
    - Nodal analysis with dependent sources
    - Mesh analysis
    - Mesh analysis with dependent sources
    - Source transformation
    - Thevenin and Norton theorems
    - Maximum power transfer theorem
5. Operational Amplifier
    - Terminal voltage and current
    - Inverting-amplifier
    - Summing amplifier
    - Non-inverting amplifier
    - Difference amplifier
    - Equivalent circuit
    - Differential mode
    - Common-mode rejection radio
6. Inductance and Capacitance
    - Inductor
    - Capacitor
    - Series-parallel combination of inductance and capacitance
7. The Natural Response of RL and RC Circuits
    - Natural response of RL circuit
    - Natural response of RC circuit
8. Step Response of 1st Order RL and RC circuit
    - Step response of RL circuit
    - Step response of RC circuit
    - Finding the step response of a 1st order RL or RC circuit
    - Integrating amplifier
9. Natural Response and Step Response of RLC Circuits
    - Natural response of a parallel RLC circuit
    - Step response of parallel RLC circuit
10. Sinusoidal Steady-State Analysis
    - Sinusoidal source
    - Sinusoidal response
    - Phasor and phasor domain
    - Kirchoff's laws in the phasor domain
    - Series-parallel and delta-wye simplification
    - Source transformation and Thevenin-Norton theorems
    - Nodal analysis
    - Mesh analysis
    - Phasor diagrams
11. Industry standard circuit simulation software package utilization

Describe circuit variables.
Describe the voltage and current relationship for DC voltage and current sources, resistors, and DC dependent sources.
Analyze simple DC resistive circuits.
Demonstrate proficiency using advanced DC circuit analysis techniques.
Analyze operational amplifier circuits.
Describe voltage and current relationship for inductors and capacitors.
Analyze the natural response to 1st order RL and RC circuits.
Demonstrate knowledge of the step response of 1st order RL and RC circuits.
Analyze the natural response and step response of 2nd order RLC circuits.
Demonstrate proficiency using advanced AC circuit analysis techniques.
Demonstrate proficiency in building circuits and making measurements utilizing a breadboard, multimeter, oscilloscope, and function generator.
Demonstrate proficiency in building and analyzing circuits utilizing an industry standard circuit simulator software.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Exams will be administered throughout the course to assess the students' learning of the subject matter. All students will be required to complete a comprehensive final examination that assesses the learning of all course objectives. Students are required to conduct circuits laboratory experiments and write reports about their findings.

General Course Requirements and Recommendations

- Students must complete several homework assignments during the course of the semester. These assignments may be tied to the lecture, text, or lab, and require some design on the part of the student.
- Students should complete at least one major computer project involving the design and analysis of a 1st or 2nd order circuit using a circuit simulation software package.

Texts
Text will be chosen from among recognized "major-level" texts.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for ENGR 240

ENGT245 - Applied Statics

Overview

Subject
Pre-Engineering

Academic Department
Pre-Engineering

School
Science, Tech, Engr & Math

Course Description
Provides the necessary mechanics background for engineering technology programs. Main topics are forces, moments, equilibrium, free body diagrams, trusses, frames, internal forces, friction, and area moment of inertia.

Course Pre-requisite(s)
C or better in MATH100 Basic Tech Mathematics or higher OR B or better in high school algebra OR eligible to take gateway MATH courses at HFC.

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
62

Total Student Contact Hours:
62

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Departmental Exam, Portfolio Review

Credit for Prior College Level Learning (CPCLL) Details
Departmental Exam Details

Student should achieve a score of 70% or higher in the departmental exam to receive credits for this course.

Goals, Topics, and Objectives

Core Course Topics

1. Forces and Force Systems

   a) Describe forces and the effects of forces
   b) Identify difference between scalar and vector quantities
   c) Define orthogonal concurrent forces: resultants and components
   d) Calculate resultants of co-planar force systems
   e) Calculate moment of a force
   f) List the Principle of Moments
   g) Calculate resultant moment from couples

2. Equilibrium of Force Systems

   a) Draw Free-Body Diagram and identify conditions of equilibrium
   b) Describe equilibrium of concurrent, parallel, and non-concurrent force systems
   c) Calculate unknown forces for an equilibrium system

3. Truss and Frame Analysis

   a) Use method of joints and sections to calculate internal force in trusses
   b) Diagram frames and calculate internal and external reactions in frames

4. Friction

   a) Identify friction and normal force
   b) Differentiate cases of actual from maximum static friction
   c) Identify frictions for different surface of contact
   d) Calculate friction for block with oblique surfaces and wedges
   e) Define friction with belts and perform primary friction calculation

5. Centroids and Centers of Gravity

   a) Describe the center of gravity and list it for basic shape
   b) Calculate centroids for composite areas

6. Area Moments of Inertia

   a) Describe the moment of inertia and find it from reference guide
   b) Calculate moment of inertia for composite areas

7. Internal Forces

   a) Draw a Free-Body Diagram for a section of 2D rigid body and show internal forces and moments
   b) Calculate shearing force, normal force, and bending moment for an internal section of 2D rigid body

Describe forces and the effects of forces

Identify difference between scalar and vector quantities

Define orthogonal concurrent forces: resultants and components

Calculate resultants of co-planar force systems

Calculate moment of a force

List the Principle of Moments

Calculate resultant moment from couples

Draw Free-Body Diagram and identify conditions of equilibrium

Describe equilibrium of concurrent, parallel, and non-concurrent force systems

Calculate unknown forces for an equilibrium system

Use method of joints and sections to calculate internal force in trusses

Diagram frames and calculate internal and external reactions in frames

Identify friction and normal force

Differentiate cases of actual from maximum static friction

Identify frictions for different surface of contact

Calculate friction for block with oblique surfaces and wedges

Define friction with belts and perform primary friction calculation

Describe the center of gravity and list it for basic shape

Calculate centroids for composite areas

Describe the moment of inertia and find it from reference guide

Calculate moment of inertia for composite areas

Draw a Free-Body Diagram for a section of 2D rigid body and show internal forces and moments

Calculate shearing force, normal force, and bending moment for an internal section of 2D rigid body

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
1- Set of homework problems
2- Tests (at least two tests)
3- Projects

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for ENGT 245

ENGT265 - Mechanical Capstone Project

Overview

Subject
Pre-Engineering

Academic Department
Pre-Engineering

School
Science, Tech, Engr & Math

Course Description
A capstone course requiring the design and development of a new product or process, by applying the engineering design process. This process includes background research and engineering analysis, prototype construction and testing, and communication and reporting. Students build critical thinking by applying their drafting and design skills in the development of new products.

Course Co-requisite(s)
ENGT245 Applied Statics can be taken previously or concurrently.

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
25

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Portfolio Review

Credit for Prior College Level Learning (CPCLL) Details
Portfolio Review

Goals, Topics, and Objectives

Core Course Topics

1. Work with sponsors, perform analyses and conduct research to develop requirements for a mechanical or industrial system or solution to a mechanical or industrial engineering problem
2. Design the system or solution methods
3. Implement a prototype, model or method according to the system or solution design
4. Operate the prototype, model or method
5. Evaluate the prototype, model or method with respect to the project requirements/constraints
6. Document the process, products, and results
7. Manage the projects and communicate the results

Show the ability to start from a sponsor's statements of need, work with the sponsor, perform appropriate research and analyses, and apply relevant engineering standards to develop formal requirements for a mechanical system, an industrial system, or the solution to a mechanical or industrial problem.
Develop multiple alternative approaches, design and implement a prototype, model, or method to meet those requirements by correctly applying appropriate engineering principles.
Operate or implement the prototype, model, or method and evaluate the results against the requirements using objective performance measures.
Plan and manage the project so as to use team resources efficiently and meet project requirements on time and on or under budget.
Constructively address ethical dilemmas that may arise and potential adverse environmental, safety, health, and social impacts.
Collaboratively produce written and oral reports that effectively communicate project information to target audiences—i.e., that are at the appropriate technical level for these audiences and follow disciplinary conventions of usage, vocabulary, format, and citation.
Function effectively on a team, contributing to all major aspects of the design, implementation, and testing of an engineering project.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement

1. Attendance is necessary for teamwork, communication, and collaboration with sponsor.
2. Documentation in Engineering Notebook. The Notebook can be reviewed by instructor as a means of progress report.
3. Electronic/web-based portfolios allow students to create, maintain, and share digital portfolios. The portfolio should be reviewed at least once a week by an instructor and provide feedback to students.
4. Final Presentation.

Texts
None

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for ENGT 265

ENGT290 - Co-Op in Engineering Technology

Overview

Subject
Pre-Engineering

Academic Department
Engineering Technology

School
Science, Tech, Engr & Math

Course Description
Cooperative education is a structured method of combining classroom-based education with practical work experience. A cooperative education experience, commonly known as a "co-op," provides academic credit for structured employment experience. Work experience must be directly related to the student's declared major in STEM to be eligible.To register for this course, a student must have completed 50% of core coursework, maintain an overall GPA of 2.0 and a program specific GPA of 2.5.

Credit Hours
2

Total Contact Hours
Total Instructor Contact Hours:
3

Total Student Contact Hours:
150

Academic Level
Undergraduate

FRE131 - Elementary French I

Overview

Subject
Language Studies

Academic Department
Language Studies

School
Liberal Arts

Course Description
Introduces the basic skills of reading, writing, speaking, and listening in French within communicative contexts. Covers the elementary pronunciation and grammatical principles necessary for comprehending and expressing simple ideas in both spoken and written French. Presents francophone culture.

Course Pre-requisite(s)
ENG094 ALP: Reading and Writing/ENG095E ALP for ELL:Reading & Writing eligible or instructor permission

Credit Hours
4

Total Contact Hours
Total Instructor Contact Hours:
62

Total Student Contact Hours:
62

Course Fee
10

Academic Level
Undergraduate

General Education Category
Humanities and Fine Arts

Michigan Transfer Agreement (MTA) Category
Category 5: Humanities and Fine Arts - Applied Degrees, Category 5: Humanities and Fine Arts - Transfer Degrees

Goals, Topics, and Objectives

Course Goals
FRE131 Elementary French I is designed to enable students to reach the Novice Mid level on the American Council on the Teaching of Foreign Languages (ACTFL) proficiency scale, focusing on language learning through communication, cultures, connections, comparisons, and communities.

Core Course Topics
1. Greetings, introductions, and farewells
2. Pronunciation
3. Alphabet
4. Numbers
5. Present-tense verbs
6. Future
7. Gender and number agreement
8. Affirmation and negation
9. Interrogatives
10. Vocabulary
11. Francophone culture

Use appropriate greetings, introductions, and farewells
Demonstrate beginning knowledge of pronunciation of French words
Demonstrate verbal and written knowledge of the French alphabet
Recognize and produce numbers, dates, and times
Demonstrate correct usage of present-tense indicative verb forms: regular and spelling change -er verbs; regular and irregular -ir verbs; avoir, être, aller, prendre, boire, and faire
Express the futur proche both orally and in writing using the aller + infinitive structure
Demonstrate knowledge of gender and number agreement of nouns, articles, descriptive possessive adjectives, and subject and direct object pronouns
Create simple affirmative and negative statements using appropriate word order
Develop and respond to interrogative questions relating to chapter/unit themes using appropriate word order
Develop and respond to interrogative questions relating to chapter/unit themes using appropriate word order
Write about, speak about, and interpret situations similar to those presented in each chapter/unit of the textbook
Compare and contrast elements of francophone culture that differ from the U.S. norm

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of academic achievement will be identified and implemented by the class instructor. Methods will include, but not be limited to:

- Participation
- Weekly/regular quizzes
- Homework assignments
- Chapter/unit tests
- Oral/receptive-expressive exam(s)
- Departmental writing assessment
- Midterm/final exam

Texts
All sections of this level will use a textbook (and any accompanying materials) selected by the course coordinator and approved by the World Languages Committee.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for FRE 131

FRE132 - Elementary French II

Overview

Subject
Language Studies

Academic Department
Language Studies

School
Liberal Arts

Course Description
Further builds reading, writing, speaking, and listening skills in French, focusing on communication in a cultural context. Develops students' knowledge of vocabulary, pronunciation and grammatical principles in order to comprehend and express everyday ideas in both spoken and written French. Presents francophone culture.

Course Pre-requisite(s)
A grade of C or better in FRE131 Elementary French I or in one year of high school French, or instructor permission

Credit Hours
4

Total Contact Hours
Total Instructor Contact Hours:
62

Total Student Contact Hours:
62

Course Fee
10

Academic Level
Undergraduate

General Education Category
Humanities and Fine Arts

Michigan Transfer Agreement (MTA) Category
Category 5: Humanities and Fine Arts - Applied Degrees, Category 5: Humanities and Fine Arts - Transfer Degrees

Goals, Topics, and Objectives

Course Goals
FRE132 Elementary French II is designed to enable students to reach the Novice High level on the American Council on the Teaching of Foreign Languages (ACTFL) proficiency scale, focusing on language learning through communication, cultures, connections, comparisons, and communities.

Core Course Topics
1. Phonetics
2. Present-tense verbs
3. Past-tense verbs
4. Commands
5. Gender and number agreement
6. Adverbs
7. Prepositions
8. Pronouns
9. Comparative and superlative structures
10. Narration
11. Francophone culture

Demonstrate basic knowledge of pronunciation of French words and phrases
Demonstrate correct usage of present-tense regular and irregular -re verbs; regular and irregular reflexive verbs; savoir and connaître, and venir
Recognize and produce passé composé (with both avoir and être) and imparfait, including regulars, irregulars, and reflexive verbs, as well as the passé recent
Recognize and produce simple formal and informal commands
Demonstrate correct usage of demonstrative adjectives with appropriate gender and number agreement
Demonstrate correct usage of select adverbs
Recognize and use select prepositions
Interpret and demonstrate correct usage of direct and indirect object pronouns, double object pronouns, as well as y and en
Compare and contrast using appropriate comparative and superlative structures
Interpret and produce simple narratives in the past using appropriate time markers and present, passé composé, and imparfait verb forms
Analyze aspects of francophone culture that differ from the U.S. norm, giving specific examples that illustrate such differences

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of academic achievement will be identified and implemented by the class instructor. Methods will include, but not be limited to:

- Participation
- Weekly/regular quizzes
- Homework assignments
- Chapter/unit tests
- Oral and/or expressive-receptive exam(s)
- Midterm/final exam

Texts
All sections of this level will use a textbook (and any accompanying materials) selected by the course coordinator and approved by the World Languages Committee.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for FRE 132

FRE231 - Second-Year French III

Overview

Subject
Language Studies

Academic Department
Language Studies

School
Liberal Arts

Course Description
Follows FRE-132 and is the first of two intermediate-level French courses focusing on communication in a cultural context. Develops students' reading, writing, speaking, and listening skills in French, expands their vocabulary, and deepens their knowledge of pronunciation and grammatical principles in order to comprehend and express essential ideas in both spoken and written French. Presents francophone culture.

Course Pre-requisite(s)
A grade of C or better in FRE132 Elementary French II or in two years of high school French, or instructor permission

Credit Hours
4

Total Contact Hours
Total Instructor Contact Hours:
62

Total Student Contact Hours:
62

Course Fee
15

Academic Level
Undergraduate

General Education Category
Humanities and Fine Arts

Michigan Transfer Agreement (MTA) Category
Category 5: Humanities and Fine Arts - Applied Degrees, Category 5: Humanities and Fine Arts - Transfer Degrees

Goals, Topics, and Objectives

Course Goals
FRE231 Second-Year French III is designed to enable students to reach the Intermediate Low level on the American Council on the Teaching of Foreign Languages (ACTFL) proficiency scale, focusing on language learning through communication, cultures, connections, comparisons, and communities.

Core Course Topics
1. Pronunciation
2. Past-tense verbs
3. Subjunctive verbs
4. Hypothetical expressions
5. Perfect verb forms
6. Commands
7. Gender and number agreement
8. Critical listening, speaking, and writing
9. Critical reading
10. Francophone culture

Demonstrate developing knowledge of pronunciation of French words and phrases

Demonstrate correct usage of present-tense verbs ouvrir, offrir, voir, recevoir, apercevoir, and croire

Recognize and produce both present and imperfect subjunctive forms, including regulars and irregulars, with appropriate independent verb clauses

Recognize and produce hypotheses using conditional verb forms appropriately, including regulars and irregulars

Demonstrate correct usage of both present and past perfect verb forms, including regular and irregular participles

Recognize and produce regular and irregular verbs in the future simple

Recognize and produce formal and informal commands, including regulars, irregulars and those with reflexive and direct and indirect object pronouns

Demonstrate correct usage of possessive adjectives and possessive pronouns with appropriate gender and number agreement

Demonstrate correct usage of indefinite and negative expressions in affirmative and negative statements and questions

Demonstrate correct usage of lequel; various relative pronouns (qui, que, dont, and où); demonstrative pronouns, and reciprocal pronouns

Write simple descriptive, narrative, and informative essays related to themes presented in each chapter/unit of the textbook using appropriate register

Interpret short authentic audio and visual materials and respond critically in French

Summarize French-language materials in written compositions and oral presentations

Analyze cultural differences as manifested through language differences

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of academic achievement will be identified and implemented by the class instructor. Methods will include, but not be limited to:

- Participation
- Homework assignments
- Weekly/regular quizzes
- Weekly/regular compositions
- Chapter/unit tests
- Oral presentation(s)/project(s)
- Midterm/final exam

Texts
All sections of this level will use a textbook (and any accompanying materials) selected by the course coordinator and approved by the World Languages Committee.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for FRE 231

FRE232 - Second-Year French IV

Overview

Subject
Language Studies

Academic Department
Language Studies

School
Liberal Arts

Course Description
Follows FRE-231 and is the second of two intermediate-level French courses focusing on communication in a cultural context. Further develops students' reading, writing, speaking, and listening skills in French, expands their vocabulary, and deepens their knowledge of pronunciation and grammatical principles in order to comprehend and express a wide range of ideas in both spoken and written French. Presents francophone culture.

Course Pre-requisite(s)
A grade of C or better in FRE231 Second-Year French III or in three years of high school French, or instructor permission

Credit Hours
4

Total Contact Hours
Total Instructor Contact Hours:
62

Total Student Contact Hours:
62

Course Fee
15

Academic Level
Undergraduate

General Education Category
Humanities and Fine Arts

Michigan Transfer Agreement (MTA) Category
Category 5: Humanities and Fine Arts - Applied Degrees, Category 5: Humanities and Fine Arts - Transfer Degrees

Goals, Topics, and Objectives

Course Goals
FRE232 Second-Year French IV is designed to enable students to reach the Intermediate Mid level on the American Council on the Teaching of Foreign Languages (ACTFL) proficiency scale, focusing on language learning through communication, cultures, connections, comparisons, and communities.

Core Course Topics
1. Pronunciation
2. Past-tense verbs
3. Subjunctive verbs
4. Hypothetical expressions
5. Perfect verb forms
6. Commands
7. Gender and number agreement
8. Critical listening, speaking, and writing
9. Critical reading
10. Francophone culture

Demonstrate intermediate knowledge of pronunciation of French words and phrases
Interpret and produce personal and historical narratives in the past using the passé composé, imparfait, passé recent, and time markers appropriately
Use a variety of verbs in the present and imperfect subjunctive tenses in noun, adjective, and adverbial clauses
Express hypotheses using the conditional and imperfect subjunctive tenses with si clauses correctly in speech and writing
Employ the present perfect future, present perfect subjunctive, past perfect subjunctive, and conditional perfect verb tenses correctly in speech and writing
Produce indirect commands in speech and writing, including regulars, irregulars and those with reflexive and direct and indirect object pronouns
Demonstrate correct usage of past participles as adjectives with appropriate gender and number agreement
Interpret authentic audio and visual materials and respond critically in French
Summarize French-language research in written compositions and oral presentations
Analyze cultural differences as manifested through language differences

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of academic achievement will be identified and implemented by the class instructor. Methods will include, but not be limited to:

- Participation
- Homework assignments
- Weekly/regular quizzes
- Weekly/regular compositions
- Chapter/unit tests
- Oral presentation(s)/project(s)
- Midterm/final exam

Texts
All sections of this level will use a textbook (and any accompanying materials) selected by the course coordinator and approved by the World Languages Committee.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for FRE 232

GEOG131 - Environmental Geography

Overview

Subject
Geography

Academic Department
Social Sciences

School
Liberal Arts

Course Description
An overview examining human environment interaction at all scales from local to global. Includes an overview of the physical environment and major earth systems with emphasis on the ways humans utilize and alter the earth's surface.

Course Pre-requisite(s)
Eligible to take ENG courses at HFC

Credit Hours
4

Total Contact Hours

Total Instructor Contact Hours:
62

Total Student Contact Hours:
62

Course Fee
10

Academic Level
Undergraduate

General Education Category
Social Sciences

Michigan Transfer Agreement (MTA) Category
Category 4: Social Sciences - Applied Degrees, Category 4: Social Sciences - Transfer Degrees

Goals, Topics, and Objectives

Core Course Topics

1. Overview of Geography and Geographic Perspective
2. Spatial Analysis
3. Human Environment Interaction
4. Mapping
5. Human Resource Use
6. Processes that shape the earth
7. Plate Tectonics, Earthquakes, Volcanoes, Glaciation, and Climate
8. Pollution
9. Spatial distribution of ecosystems
10. Human alteration of the physical landscape

Explain spatial analysis and describe the geographic approach and perspective.

Explain the spatial organization of people, places, and environments on the earth's surface.

Explain the physical processes that shape major patterns on the earth's surface.

Explain how to use maps to interpret the past, understand the present, and plan for the future.

Describe the characteristics and spatial distribution of ecosystems on the earth's surface.

Discuss how culture influences the ways people interact with and use the environment

Identify the spatial variations of human resource use.

Provide examples of how human actions modify the physical environment.

Describe how physical systems affect human systems.

Discuss forms of pollution and the resulting impacts on the physical environment and humans.

Analyze an environmental problem from a geographic perspective by describing the nature of the problem, assessing the present and long term impacts on people and the environment, and determining the best possible solutions and actions needed to solve or mitigate the problem.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of academic achievement may include (but is not limited to) exams, quizzes, essays, homework, and projects.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for GEOG 131

GEOG132 - World Regional Geography

Overview

Subject
Geography

Academic Department
Social Sciences

School
Liberal Arts

Course Description
An overview examining the spatial distribution of people and places around the world, with emphasis on the cultural, political, social, and economic aspects of regions. Topics are explored by examining ways that humans interact with the environment and one another. Emphasis is placed on the spatial variation of human activities at all scales from local to global.

Course Pre-requisite(s)
Eligible to take ENG courses at HFC

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
10

Academic Level
Undergraduate

General Education Category
Social Sciences

Michigan Transfer Agreement (MTA) Category
Category 4: Social Sciences - Applied Degrees, Category 4: Social Sciences - Transfer Degrees

Goals, Topics, and Objectives

Core Course Topics

1. Overview of Geography and Geographic Perspective
2. Spatial Analysis and Global Perspective
3. Perception of People and Place
4. Population Distribution and Settlement Patterns
5. Regional Approach: overview of human geography including cultural, political, social, economic and historical geography in numerous world regions, including North America.
6. Spatial Distribution of Culture
7. Global Patterns of Development
8. Colonialism and the Uneven Spatial Distribution of Wealth
9. Human Use of the Environment
10. Population Growth, Immigration, and Migration
11. Global Current Events from a Geographic Perspective

Explain spatial analysis and describe the geographic approach and perspective.

Explain the spatial organization of people and places on the earth's surface.

Describe the human and physical characteristics of places.

Explain how to use maps to interpret the past, understand the present, and plan for the future.

Explain how culture and experience influence people's perceptions of places, regions, and peoples.

Discuss the spatial distribution,characteristics, and complexity of cultural landscapes on the earth's surface.

Discuss ethnocentrism from a spatial perspective at local, regional, national and global scales.

Contrast characteristics of more developed countries with characteristics of less developed countries.

Describe the processes determining the uneven spatial distribution of wealth at local, national, and global scales

Explain several global issues (cultural, political, social, economic, environmental) from a geographic perspective.

Compare and contrast human (cultural, political, social, economic) characteristics and environmental characteristics of the United States with several other countries.

Analyze a global issue or challenge from a geographic perspective by describing the nature of the challenge, assessing the present and long term impacts on people and the environment, and determining the best possible decisions and actions needed to solve or mitigate the challenge.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of academic achievement may include (but is not limited to) exams, quizzes, essays, homework, and projects.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for GEOG 132

GEOG138 - Geography of Michigan

Overview

Subject
Geography

Academic Department
Social Sciences

School
Liberal Arts

Course Description
Examines the spatial distribution of the human and environmental landscapes of Michigan. Places particular attention on the historical geography of settlement and human use of the natural environment.

Course Pre-requisite(s)
Eligible to take ENG courses at HFC

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
10

Academic Level
Undergraduate

General Education Category
Social Sciences

Michigan Transfer Agreement (MTA) Category
Category 4: Social Sciences - Applied Degrees, Category 4: Social Sciences - Transfer Degrees

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
Other

Goals, Topics, and Objectives

Core Course Topics

1. Overview of Geography and Geographic Perspective
2. Spatial Analysis
3. Overview of Human Geography: cultural, economic, political, historical.
4. Overview of Physical Geography
5. Population and Human Settlement Patterns
6. Economic Activities
7. Human Resource Use
8. The Geography of Detroit

Explain spatial analysis and describe the geographic approach and perspective.

Explain the spatial organization of people, places, and environments in Michigan.

Explain how to use maps to interpret the past, understand the present, and plan for the future.

Describe the human and physical characteristics of places in Michigan.

Discuss population patterns and the historical geography of human settlement in Michigan.

Identify the major economic activities of Michigan and explain the spatial distribution of those activities.

Discuss cultural, social, economic, political and environmental patterns in Michigan within local, regional, national, and global contexts.

Discuss resource use and provide examples of how human actions modify the physical environment in Michigan.

Analyze a current issue or challenge in Michigan from a geographic perspective. Describe the nature of the challenge, assess the present and long term impacts on people and the environment, and determine the best possible solutions and actions needed to solve or mitigate the problem.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Each instructor will identify and implement appropriate methods to assess the achievement of the learning objectives for the course.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for GEOG 138

GEOG221 - Geography of the Middle East

Overview

Subject
Geography

Academic Department
Social Sciences

School
Liberal Arts

Course Description
Examines the cultural geography of Middle Eastern peoples, and the social, historical, economic and political geographies of the region. Includes an overview of the physical environment, and an examination of common stereotypes, perception of people and place, Arab immigration and settlement in the United States, and current Arab American issues.

Course Pre-requisite(s)
Eligible to take ENG courses at HFC

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
30

Academic Level
Undergraduate

General Education Category
Social Sciences

Michigan Transfer Agreement (MTA) Category
Category 4: Social Sciences - Applied Degrees, Category 4: Social Sciences - Transfer Degrees

Goals, Topics, and Objectives

Core Course Topics

1. Overview of Geography, Geographic Perspective, and Spatial Analysis
2. Global Perspective
   - Interaction between local, national, regional, and global scales.
3. Perception of People and Place with Focus on United States and Midde East - Common Stereotypes and Misinformation
4. Overview of Middle East Region
   - Human Geography: cultural, political, social, economic and historical geographies.
   - Physical Geography: environmental geography with focus on water and vulnerability to climate change.
5. Cultural Geography of the Middle East
6. Physical Geography of the Middle East
7. Monotheism: Judaism, Christianity and Islam
8. Colonialism, the Ottoman Legacy and Western Domination
9. Settlement Patterns and Human Use of the Environment
10. Political Instability and Challenges
11. Population Patterns, Migration and Immigration in the United States
12. Overview of Arab Americans
    - Immigration
    - Patterns of diversity: cultural, social, economic, political, country of origin
    - Current issues

Explain spatial analysis and describe the geographic approach and holistic, global perspective.

Explain the spatial organization of people and places in this region.

Describe human and physical characteristics in this region.

Explain how to use maps to interpret the past, understand the present, and plan for the future.

Identify common stereotypes and misconceptions in the United States about the people and places of this region.

Explain how culture and experience influence people's perceptions of places, regions and peoples.

Discuss ethnocentrism from a spatial perspective.

Describe the spatial variation of culture in this region.

Describe the spatial variation of the physical environment in this region.

Explain major processes leading to the current political instability and challenges in this region.

Explain several regional issues (cultural, political, social, economic, environmental) from a geographic perspective.

Discuss Arab Immigration in the United States and the cultural, political, social, and economic factors impacting settlement patterns.

Provide an overview of Arab Americans and discuss key issues related to Arab Americans.

Analyze an issue or challenge impacting this region utilizing a geographic perspective by describing the nature of the challenge, assessing the present and long term impacts on people and environment, and determining the best possible decisions and actions needed to solve or mitigate the challenge.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Each instructor will identify and implement appropriate methods to assess the achievement of the learning objectives for this course.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for GEOG 221

GEOL131 - Physical Geology

Overview

Subject
Geology

Academic Department
Physics, Astronomy, and Earth Sciences

School
Science, Tech, Engr & Math

Course Description
Introduces the materials, processes, and concepts of geology. Topics include minerals, rocks, plate tectonics, earthquakes, volcanism, erosion, water, wind, glaciers, and geologic time. Laboratory work is devoted to hands-on projects involving geologic materials and processes, including rocks and minerals, maps, folds and faults, and dating of geologic features and events. This is a four (4) credit course with three (3) hours of lecture and two (2) hours of laboratory per week.

Credit Hours
4

Total Contact Hours
Total Instructor Contact Hours:
77

Total Student Contact Hours:
77

Course Fee
22

Academic Level
Undergraduate

General Education Category
Natural Sciences

Michigan Transfer Agreement (MTA) Category
Category 6: Natural Sciences - Applied Degrees, Category 6: Natural Sciences - Transfer Degrees - Lecture and Lab

Goals, Topics, and Objectives

Course Goals
To give students the opportunity to understand the interactions between rock, water, air, and energy on and within the Earth; also, to develop students' confidence in scientific methodology, interpretation and reaction to scientific issues affecting the world.

Core Course Topics
1. Minerals
2. Rocks
3. Plate Tectonics
4. Geologic Time
5. Mass Wasting
6. River Systems
7. Glaciers
8. Deserts
9. Volcanism
10. Earthquakes
11. Crustal Deformation

Identify and classify minerals.

Identify and classify igneous, sedimentary, and metamorphic rocks.

State the modes of occurrence of the three rock types.

Explain the basic tenets of the theory of plate tectonics, and how it serves as a "unifying theory" for geology.

Identify the major features of river systems, glaciers, and volcanoes.

List the controls on the character of volcanic eruptions.

Explain the roles of running water, ice, wind, and mass wasting (e.g. landslides) in shaping the Earth's surface.

Identify the major types of seismic waves, and explain the differences between them.

Explain how earthquakes occur.

List the major divisions of the geologic time scale, and explain how the time scale is constructed.

Use relative dating principles to place a sequence of geologic events and features in their correct order using a block diagram.

Compute absolute ages using radiometric dating principles.

Communicate concepts through the spoken and written word, and through data graphs and charts.

Apply rigorous thought and observation to scientific problems.

Arrange objects, events, or ideas in a specific order.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Student mastery of course objectives will be achieved through class participation, laboratory projects, weekly review questions, in-class quizzes, and exams;

The course is divided into three (3) units, each of which will be presented with a combination of lectures, readings, and laboratories. Student mastery of course topics will be assessed on an ongoing basis through instructor scoring of lab and homework assignments and quizzes, and feedback to students on areas needing improvement. Assessment of overall mastery within each course unit will be accomplished through an exam scheduled to take place at the end of the unit.

General Course Requirements and Recommendations
This is a four (4) credit course with three (3) hours of lecture and two (2) hours of laboratory per week. Students are expected to attend all class sessions. Attendance is taken by the instructor.

Texts
Essentials of Geology, by Lutgens, F.K., and Tarbuck, E.J., published by Pearson Prentice-Hall, 2006Laboratory Manual in Physical Geology, edited by Richard M. Busch

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for GEOL 131

GER131 - Elementary German I

Overview

Subject
Language Studies

Academic Department
Language Studies

School
Liberal Arts

Course Description
Introduces the basic skills of reading, writing, speaking, and listening in German within communicative contexts. Covers the elementary pronunciation and grammatical principles necessary for comprehending and expressing simple ideas in both spoken and written German. Presents the cultures of German-speaking countries.

Course Pre-requisite(s)
ENG094 ALP: Reading and Writing/ENG095E ALP for ELL:Reading & Writing eligible or instructor permission

Credit Hours
4

Total Contact Hours
Total Instructor Contact Hours:
62

Total Student Contact Hours:
62

Course Fee
10

Academic Level
Undergraduate

General Education Category
Humanities and Fine Arts

Michigan Transfer Agreement (MTA) Category
Category 5: Humanities and Fine Arts - Transfer Degrees, Category 5: Humanities and Fine Arts - Applied Degrees

Goals, Topics, and Objectives

Course Goals
GER131 Elementary German I is designed to enable students to reach the Novice Mid level on the American Council on the Teaching of Foreign Languages (ACTFL) proficiency scale, focusing on language learning through communication, cultures, connections, comparisons, and communities.

Core Course Topics
1. Greetings, introductions, and farewells
2. Phonetics and alphabet
3. Numbers
4. Present-tense verbs
5. Commands
6. Gender, number, and case agreement
7. Prepositions
8. Negation
9. Word order
10. Pronouns
11. Vocabulary
12. Geography
13. Culture

Use appropriate greetings, introductions, and farewells

Demonstrate knowledge of phonetics and the alphabet through the comprehensible pronunciation and spelling of German words

Recognize and produce numbers, dates, and times

Demonstrate correct usage of present-tense verbs, including regular, irregular, seperable-prefix, and modal verbs

Recognize and produce simple formal and informal commands

Demonstrate knowledge of gender and number agreement of nouns, definite and indefinite articles, and possessive pronouns in nominative and accusative cases

Recognize and produce select accusative (and dative) prepositions

Employ nicht and kein to negate sentences

Develop syntactically correct statements, yes/no questions, and questions using interrogatives

Demonstrate correct usage of nominative and accusative pronouns

Write about, speak about, and interpret situations similar to those presented in each chapter/unit of the textbook

Recognize major geographical features of German-speaking countries

Compare and contrast elements of German-speaking countries' cultures that differ from the U.S. norm

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of academic achievement will be identified and implemented by the class instructor. Methods will include, but not be limited to:

- Participation
- Weekly/regular quizzes
- Homework assignments
- Chapter/unit tests
- Oral/receptive-expressive exam(s)
- Departmental writing assessment
- Midterm/final exam

General Course Requirements and Recommendations
Note: A grade of C- is not transferable and is not accepted by some programs at HFC.

Texts
All sections of this level will use a textbook (and any accompanying materials) selected by the course coordinator and approved by the World Languages Committee.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for GER 131

GER132 - Elementary German II

Overview

Subject
Language Studies

Academic Department
Language Studies

School
Liberal Arts

Course Description
Further builds reading, writing, speaking, and listening skills in German, focusing on communication in a cultural context. Develops students' knowledge of vocabulary, pronunciation and grammatical principles in order to comprehend and express everyday ideas in both spoken and written German. Presents the cultures of German-speaking countries.

Course Pre-requisite(s)
A grade of C or better in GER131 Elementary German I or in one year of high school German, or instructor permission

Credit Hours
4

Total Contact Hours
Total Instructor Contact Hours:
62

Total Student Contact Hours:
62

Course Fee
10

Academic Level
Undergraduate

General Education Category
Humanities and Fine Arts

Michigan Transfer Agreement (MTA) Category
Category 5: Humanities and Fine Arts - Applied Degrees, Category 5: Humanities and Fine Arts - Transfer Degrees

Goals, Topics, and Objectives

Course Goals
GER132 Elementary German II is designed to enable students to reach the Novice High level on the American Council on the Teaching of Foreign Languages (ACTFL) proficiency scale, focusing on language learning through communication, cultures, connections, comparisons, and communities.

Core Course Topics
1. Present-tense verbs
2. Past-tense verbs
3. Future expressions
4. Gender, number and case agreement
5. Prepositions
6. Word order
7. Pronouns
8. Comparative and superlative structures
9. Conjunctions
10. Vocabulary
11. Essay Narration
12. Culture

Demonstrate correct usage of present-tense reflexive verbs
Recognize and produce common regular and irregular verbs in the Perfekt and Imperfekt
Express the future using werden
Distinguish between and produce accusative and dative declinations of nouns, definite and indefinite articles, and possessive pronouns
Distinguish between and produce accusative (motion) and dative (location) after two-way prepositions; recognize and produce common verb-preposition combinations
Order adverbs and adverbial phrases correctly
Recognize and demonstrate correct usage of accusative and dative pronouns
Compare and contrast using appropriate comparative and superlative structures
Recognize and demonstrate correct usage of coordinating and some common subordinating conjunctions
Write about, speak about, and interpret simple dialogues and paragraphs related to themes presented in each chapter/unit of the textbook
Interpret and produce simple narratives in the present and past using appropriate time markers
Analyze aspects of German-speaking countries' cultures that differ from the U.S. norm, giving specific examples that illustrate such differences

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of academic achievement will be identified and implemented by the class instructor. Methods will include, but not be limited to:

- Participation
- Weekly/regular quizzes
- Homework assignments
- Chapter/unit tests
- Oral and/or expressive-receptive exam(s)
- Midterm/final exam

General Course Requirements and Recommendations
Note: A grade of C- is not transferable and is not accepted by some programs at HFC.

Texts
All sections of this level will use a textbook (and any accompanying materials) selected by the course coordinator and approved by the World Languages Committee.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for GER 132

GER231 - Second-Year German III

Overview

Subject
Language Studies

Academic Department
Language Studies

School
Liberal Arts

Course Description
Follows GER-132 and is the first of two intermediate-level German courses focusing on communication in a cultural context. Develops students' reading, writing, speaking, and listening skills in German, expands their vocabulary, and deepens their knowledge of pronunciation and grammatical principles in order to comprehend and express essential ideas in both spoken and written German. Presents the cultures of German-speaking countries.

Course Pre-requisite(s)
A grade of C or better in GER132 Elementary German II or in two years of high school German, or instructor permission

Credit Hours
4

Total Contact Hours
Total Instructor Contact Hours:
62

Total Student Contact Hours:
62

Course Fee
15

Academic Level
Undergraduate

General Education Category
Humanities and Fine Arts

Michigan Transfer Agreement (MTA) Category
Category 5: Humanities and Fine Arts - Applied Degrees, Category 5: Humanities and Fine Arts - Transfer Degrees

Goals, Topics, and Objectives

Course Goals
GER231 Second-Year German III is designed to enable students to reach the Intermediate Low level on the American Council on the Teaching of Foreign Languages (ACTFL) proficiency scale, focusing on language learning through communication, cultures, connections, comparisons, and communities.

Core Course Topics
1. Past-tense verbs
2. Reported speech
3. Hypothetical expressions
4. Passive voice
5. Gender, number and case agreement
6. Prepositions
7. Pronouns
8. Conjunctions
9. Vocabulary
10. Essay composition
11. Culture

Interpret fiction and non-fiction texts written in the Imperfekt
Recognize reported or indirect speech of Konjunktiv 1
Recognize and produce statements contrary to fact using Konjunktiv 2
Recognize and produce the passive voice
Demonstrate correct usage of adjective endings
Recognize and produce da und wo Komposita
Recognize and produce relative pronouns in compound clauses
Employ subordinating conjunctions to make arguments
Write about, speak about, and interpret intermediate dialogues and texts related to themes presented in each chapter/unit
Write simple descriptive, narrative, and informative essays related to themes presented in each chapter/unit of the textbook using register-appropriate vocabulary
Analyze cultural differences as manifested through language differences

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of academic achievement will be identified and implemented by the class instructor. Methods will include, but not be limited to:

- Participation
- Homework assignments
- Weekly/regular quizzes
- Weekly/regular compositions
- Chapter/unit tests
- Oral presentation(s)/project(s)

General Course Requirements and Recommendations
Note: A grade of C- is not transferable and is not accepted by some programs at HFC.

Texts
All sections of this level will use a textbook (and any accompanying materials) selected by the course coordinator and approved by the World Languages Committee.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for GER 231

GER232 - Second-Year German IV

Overview

Subject
Language Studies

Academic Department
Language Studies

School
Liberal Arts

Course Description
Follows GER-231 and is the second of two intermediate-level German courses focusing on communication in a cultural context. Further develops students' reading, writing, speaking, and listening skills in German, expands their vocabulary, and deepens their knowledge of pronunciation and grammatical principles in order to comprehend and express a wide range of ideas in both spoken and written German. Presents the cultures of German-speaking countries.

Course Pre-requisite(s)
A grade of C or better in GER231 Second-Year German III or in three years of high school German, or instructor permission

Credit Hours
4

Total Contact Hours
Total Instructor Contact Hours:
62

Total Student Contact Hours:
62

Course Fee
15

Academic Level
Undergraduate

General Education Category
Humanities and Fine Arts

Michigan Transfer Agreement (MTA) Category
Category 5: Humanities and Fine Arts - Transfer Degrees, Category 5: Humanities and Fine Arts - Applied Degrees

Goals, Topics, and Objectives

Course Goals
GER232 Second-Year German IV is designed to enable students to reach the Intermediate Mid level on the American Council on the Teaching of Foreign Languages (ACTFL) proficiency scale, focusing on language learning through communication, cultures, connections, comparisons, and communities.

Core Course Topics
1. Present-tense verbs
2. Past-tense verbs
3. Pluperfect
4. Infinitive constructions
5. Prepositions
6. Participles
7. Conjunctions
8. Critical listening, speaking, and writing
9. Critical reading
10. Culture

Compare and contrast non-equivalent uses of reflexive verbs
Interpret and produce personal and historical narratives in the past using Perfekt and Imperfekt, and time markers appropriately
Use the Plusquamperfekt to narrate past-tense events
Recognize and produce infinitive clauses, including um...zu
Recognize and produce common adjective and preposition combinations
Recognize and build Partizip I and Partizip 2 to describe nouns
Recognize and use two-part conjunctions
Interpret authentic audio and visual materials and respond critically in German
Summarize German-language texts in written compositions and oral presentations
Analyze cultural differences as manifested through language differences

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of academic achievement will be identified and implemented by the class instructor. Methods will include, but not be limited to:

- Participation
- Homework assignments
- Weekly/regular quizzes
- Weekly/regular compositions
- Chapter/unit tests
- Oral presentation(s)/project(s)
- Midterm/final exam

General Course Requirements and Recommendations
Note: A grade of C- is not transferable and is not accepted by some programs at HFC.

Texts
All sections of this level will use a textbook (and any accompanying materials) selected by the course coordinator and approved by the World

Languages Committee.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for GER 232

HCS103 - Employment Skills for Health Careers

Overview

Subject
Allied Health

Academic Department
Health, Education, and Human Services

School
Health & Human Services

Course Description
Explores the transition from campus to the workplace. Discusses career planning, workplace basics, and employer expectations. Also covers job search skills, networking, communication skills, interview techniques, organization systems, relationships, and management/employee issues. Emphasizes how to develop marketing strategies for health care positions and how to complete a resume package.

Credit Hours
1

Total Contact Hours
Total Instructor Contact Hours:
16

Total Student Contact Hours:
16

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Accountability and Workplace Relationships
2. Communication
3. Conflict and Negotiation
4. Role of Management in Healthcare
5. Health Care Economic Basics
6. Job Search Skills
7. Resume Package
8. Interview Techniques
9. Etiquette and Dress
10. Electronic Communication

Identify the characteristics of a team player.
Differentiate between responsibility and authority.
Explain the common barriers to communication.
Describe conflict management methods.
Describe basic characteristics of the health care economic environment.
Explain the role of management.
Discuss the possible responses to adverse management decisions.
Identify causes of resistance to change.
Prepare a resume, cover letter, reference sheet, and thank you letter.
Describe the various methods of a job search.
List employment websites for healthcare agencies in this region.
Discuss guidelines for conduct before, during, and after an employment interview.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of achievement is measured using a combination of tests, quizzes, assignments and participation.

General Course Requirements and Recommendations

- Instructors (or their designees) reserve the right to require students to provide proper picture identification for test taking, graded papers or projects or other appropriate purposes.
- HFCC Policy on Academic Dishonesty (Cheating) will be followed in this course.

Grading Scale
Grading scale for exams and the final grade:

- 98-100% = A+
- 93-97% = A
- 90-92% = A-
- 87-89% = B+
- 83-86% = B
- 80-82% = B-
- 76-79% = C+
- 70-75% = C
- 67-69% = D+
- 63-66% = D
- 60-62% = D-

- 59% & below = E

Texts
Textbook(s) determined through the School of Health and Human Services approval.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for HCS 103

HCS124 - Basic Health Assessment

Overview

Subject
Allied Health

Academic Department
Health, Education, and Human Services

School
Health & Human Services

Course Description
Focuses on theory and techniques involved in basic patient assessment using vital signs. Addresses the areas of medical asepsis, standard precautions, proper body mechanics, and patient transportation. Laboratory activities.

Credit Hours
1

Total Contact Hours
Total Instructor Contact Hours:
16

Total Student Contact Hours:
16

Course Fee
15

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
Other

Goals, Topics, and Objectives

Core Course Topics

1. Medical Asepsis & Standard Precautions
2. Isolation Procedures / Handwashing
3. Vital Signs – Temperature, Pulse & Respiration
4. Blood Pressure
5. Body Mechanics & Patient Transfer

Explain the importance of infection control practices in maintaining the safety of the health care worker and patients.
Identify the preventive procedures included in the Standard Precautions.
Demonstrate proper hand washing procedure.
Describe the terminology used when assessing patient vital signs: body temperature, pulse, respiratory rate, & blood pressure.
Differentiate normal & abnormal values for body temperature, pulse, respiratory rate & blood pressure.
Perform correct measurements of patient vital signs: body temperature, pulse, respiratory rate, & blood pressure.
Discuss proper body mechanics and/or transportation of patients.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of achievment is based on exams ans skill checks.

General Course Requirements and Recommendations

- Instructors (or their designees) reserve the right to require students to provide proper picture identification for test taking, graded papers or projects or other appropriate purposes.
- HFCC Policy on Academic Dishonesty (Cheating) will be followed in this course.

Grading Scale
The final grade will be computed based on the following:

- Exam 1 = 15%
- Exam 2 = 15%
- Exam 3 = 15%
- Hand washing Performance Skill = 5%
- Temp, Pulse, & Resp. Rate Performance Skill = 15%
- Blood Pressure Performance Skill = 10%
- Comprehensive Final Exam = 25%
- Total = 100%

Grading scale for exams and the final grade:

- 98-100% = A+
- 93-97% = A
- 90-92% = A-
- 87-89% = B+
- 83-86% = B
- 80-82% = B-
- 76-79% = C+
- 70-75% = C
- 67-69% = D+
- 63-66% = D
- 60-62% = D-

Texts • 59% & below = E
Textbook(s) determined through the School of Health and Human Services approval.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for HCS 124

HCS131 - Computers in Health Care

Overview

Subject
Allied Health

Academic Department
Health, Education, and Human Services

School
Health & Human Services

Course Description
Presents the fundamentals of computer technology and specific applications that are important to the delivery of health care. Also examines legal and ethical considerations in the processing of confidential patient and medical information. Lab activities.

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
25

Academic Level
Undergraduate

General Education Category
Computer Technology

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Goals, Topics, and Objectives

Core Course Topics

1. Basic Computer Skills
2. Medical Informatics
3. Telemedicine
4. Information Technology in Healthcare
5. Information Technology in Public Health
6. Word Processing
7. Spreadsheets
8. Presentation Software
9. Security and Privacy

Define and discuss medical/health informatics.
Explain the differences between systems and application software.
Discuss uses of a differences among patient electronic record systems.
State the uses of telecommunications and networking.
Discuss the ethical, professional, and legal responsibilities of the health care worker with regards to information in the medical record.
Discuss the importance of technology and the impact of computer systems on patient care and treatment.
Define telemedicine and give examples of its uses in health care.
Discuss the applications for technology in various health care settings to include radiology, surgery, pharmacy, and rehab therapies, as well as public health.
Retrieve patient data using systems appropriate to the health care setting.
Demonstrate the input use of information systems for basic medical resources and data collection.
Navigate Henry Ford College network and the student portal.
Operate basic PC hardware, including common input, output, and storage devices.
Utilize an operating system to perform basic tasks, such as finding, saving, copying, and printing files.
Send and receive email, including attachments.
Utilize basic word processing, presentation, and spread sheet software.
Utilize a browser for Internet access, use search engines, identify appropriate search terms, and use a search engine effectively.

Explain the implications for computer technology in your selected allied health profession.
Discuss the impact of privacy and security related to the use of technology in healthcare.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Students will be assessed using quizzes and assignments based on Chapter assignments, 3 lab practicals (Word processing, Spreadsheets, and Presentation Software), and a final exam.
General Course Requirements and Recommendations
Basic Computer Skills – The student will receive instruction and practically apply skills in operating basic hardware, using a mouse, saving and retrieving files, downloading information, printing, etc., and using basic computer operations.

Word Processing Software – The student will use word processing software to create documents and exercise basic word processing skills.

Spreadsheet Software – The student will use spreadsheet software to create a health care related spreadsheet (to include a variety of basic formulas, graphs, charts, and functions).

Presentation Software – The student will use presentation software to create a health care related presentation (to include using action buttons, preset animation, imported images, graphs, and charts).

Internet Search – The student will use internet search skills to locate information on the internet, identify appropriate search terms, download files, and use search engines effectively.

Course assignments and quizzes will be based on topics as outlined in the course syllabus. There will be three practical activities assigned (word processing, spread sheet, and presentation).

Student Responsibility – The student will abide by the Henry Ford College computer Usage Policy. The student will demonstrate personal responsibility in the care and use of lab equipment, copyright laws, netiquette, privacy issues, and follow all academic policies, including but not limited to those on cheating and plagiarism.

Instructors (or their designees) reserve the right to require students to provide proper picture identification for test taking, graded papers or projects or other appropriate purposes.

HFC Policy on Academic Dishonesty (Cheating) will be followed in this course.

Grading Scale
Grading scale for exams and the final grade:

- 98-100% = A+
- 93-97% = A
- 90-92% = A-
- 87-89% = B+
- 83-86% = B
- 80-82% = B-
- 76-79% = C+
- 70-75% = C
- 67-69% = D+
- 63-66% = D
- 60-62% = D-
- 59% & below = E

There is a final exam for this course. It is required for all students to take the final exam in order to complete the course. The grade will be calculated using the following:

- Quizzes, assignments, and/or participation = 50%
- Practical activities = 30% (10% each)
- Final exam = 20%

Texts
Textbook(s) determined through the School of Health and Human Services approval.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for HCS 131

HHS100 - Introduction to Social Work

Overview

Subject
Social Work

Academic Department
Health, Education, and Human Services

School
Health & Human Services

Course Description
The course takes a generalist practitioner approach to introduce social work philosophy, values, ethics, and the social work processes embedded within the field. This course is intended to provide students with a basic knowledge of the different elements of the social systems approach and how change can affect an individual's and family's ability to meet human needs.

Course Pre-requisite(s)
ENG131 Introduction College Writing Eligible

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
25

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Social work philosophy, values, and ethics (National Association of Social Workers (NASW) Ethics)
2. Social work professions, degrees and certifications
3. History of social welfare practices
4. Social work system approaches
5. Social work resources
6. Vulnerable groups served at internship
7. Human services social work resources at internship
8. Social worker professionalism

Analyze the historical factors affecting current social work trends.
Compare and contrast the different professional social worker roles.
Analyze the historical factors affecting current social work trends.
Identify and discuss the application of social systems approaches.
Compare and contrast the different professional social worker roles.
Discuss vulnerable groups and their representation in human services agency as well as their social, financial, and political challenges.
Discuss vulnerable groups and their representation in human services agency as well as their social, financial, and political challenges.
Discuss vulnerable groups and their representation in human services agency as well as their social, financial, and political challenges.
Compare and contrast the different professional social worker roles.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of academic achievement may include, but not limited to case studies, quizzes, research projects, research papers, daily interactive journals, group assignments, and final exam.
General Course Requirements and Recommendations
Students must have a cleared criminal background check within the last year.

Grading Scale
Students must earn at least 70% of the points available to earn a C grade.

Grading scale for exams and the final grade:

- 90% to 100% = A
- 80% to 89% = B
- 70% to 79% = C
- 60% to 69% = D
- 50% to 59% = E

Texts
To be determined by Program Faculty

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for HHS 100

HHS101 - Intro to Counseling & Interviewing Skill

Overview

Subject
Social Work

Academic Department
Health, Education, and Human Services

School
Health & Human Services

Course Description
Introduces the basic techniques of interviewing, counseling, and treatment therapies used in the mental health and social work fields. Course is comprised of two parts: theory and field experience. The theoretical portion will introduce interviewing, counseling, and treatment therapies through 45 hours of in-class instruction. The course will expand on the historical and political aspects of the field of social work. Field experience will provide students the opportunity to learn at cooperating mental health agencies, under the guidance of a licensed professional, for 45 clock hours of off-campus learning.

Course Pre-requisite(s)
HHS100 Introduction to Social Work, PSY131 Introductory Psychology

Credit Hours
4

Total Contact Hours
Total Instructor Contact Hours:
92

Total Student Contact Hours:
92

Course Fee
25

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Counseling and social work theories
2. Counseling and social work techniques
3. Field experience

Discuss counseling, mental health, and social work philosophies, values, and ethics.
Analyze the historical factors affecting current counseling, mental health, and social work trends.
Compare and contrast different frameworks and the varying political systems motivating those frameworks.
Identify vulnerable groups within the U.S. society.
Identify and interpret political factors which contribute to societys' desires or refusals to supply needed services.
Define the roles and functions of a community-based social service technician or a member of a clinical treatment or recovery support services team.
Compare and contrast different counseling and social work techniques.
Identify processes, programs, organizations, and tangible resources that are available to those in need.
Participate in active listening and communication activities.
Identify the different professional roles available in the areas of counseling, mental health, and social work.
Demonstrate and apply knowledge about diversity.
Apply theory to practice within a field experience under the direction of a licensed professional counselor, social worker, or psychologist.
Participate in active listening and communication activities.
Define the roles and functions of a community-based social service technician or a member of a clinical treatment or recovery support services team.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of academic achievement may include, but not be limited to case studies, field experience reports, quizzes, research projects, research papers, group assignments, or final exam.

General Course Requirements and Recommendations
Students must have a cleared criminal background check within the last year.

Grading Scale
Students must earn at least 70% of the points available to earn a C grade.

Grading scale for exams and the final grade:

- 90% to 100% = A
- 80% to 89% = B
- 70% to 79% = C
- 60% to 69% = D
- 50% to 59% = E

Texts
To be determined by program faculty.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for HHS 101

HHS102 - Intro to Interpersonal Theory & Practice

Overview

Subject
Social Work

Academic Department
Health, Education, and Human Services

School
Health & Human Services

Course Description
Introduces interpersonal theories used when working with clients and provides students the opportunity to practice these theories at a field experience. Course is comprised of two parts: theory and field experience. The theoretical portion will focus on behavior modification, transactional analysis, cognitive approaches, assertiveness training, and addictions theory. Community resources and the referral process will also be researched and analyzed. The in-class theoretical portion of this course will consist of 45 hours of instruction. Field experience will provide students the opportunity to learn at a cooperating mental health agency, under the guidance of a licensed professional, for 45 clock hours of off-campus learning.

Course Pre-requisite(s)
HHS100 Introduction to Social Work, PSY131 Introductory Psychology

Course Co-requisite(s)
PSY251 Abnormal Psychology

Credit Hours
4

Total Contact Hours
Total Instructor Contact Hours:
92

Total Student Contact Hours:
92

Course Fee
25

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

- Counseling and social work interpersonal theories and practice
- Behavior Modification
- Transactional Analysis
- Cognitive Approaches
- Assertiveness Training
- Addictions Theory
- Field experience

Discuss theoretical and philosophical mental health assumptions.

Identify issues with the application of counseling theories to intervention and planning.

Discuss the application of counseling theories to a diverse community of patients.

Discuss how interpersonal theory and practice are used in a clinical setting.

Describe processes and techniques used in the practice of counseling and social work.

Understand counseling outcomes and develop techniques for relaying information to patients.

Explore the components of behavior modification.

Analyze a behavior modification plan.

Describe transactional analysis.

Identify when transactional analysis has occurred.

Compare and contrast different cognitive approaches

Model the use of assertiveness training

Discuss addictions theory and its applications to social work and counseling practice.

Discuss the application of counseling theories to a diverse community of patients.

Integrate mental health ethical issues in to clinical practice.

Analyze the application of interpersonal theory to practice.

Analyze mental health issues.

Support mental health professional with cases.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of academic achievement may include, but not be limited to case studies, field experience reports, quizzes, research projects, research papers, group assignments, or final exam.
General Course Requirements and Recommendations
Students must have a cleared criminal background check within the last year.
Grading Scale
Students must earn at least 70% of the points available to earn a C grade.

Grading scale for exams and the final grade:

- 90% to 100% = A
- 80% to 89% = B
- 70% to 79% = C
- 60% to 69% = D
- 50% to 59% = E

Texts
To be determined by program faculty

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for HHS 102

HHS201 - Mental Health Techician I

Overview

Subject
Social Work

Academic Department
Health, Education, and Human Services

School
Health & Human Services

Course Description
Explores mental health theories used when working with clients and provides the students with the opportunity to practice these theories at a field experience. Course is comprised of two parts: theory and field experience. The theoretical portion will focus on group dynamics as used in the treatment modalities of the mental health fields, education, and social work fields. The in-class portion of this course will consist of 45 hours of instruction. Field experience will provide students the opportunity to learn at a cooperating mental health agency, under the guidance of a licensed professional, for 135 clock hours of off-campus learning.

Course Pre-requisite(s)
HHS101 Intro Counseling & Interview, HHS102 Intro Interpersonal Theo&Prac2, PSY251 Abnormal Psychology

Credit Hours
6

Total Contact Hours

Total Instructor Contact Hours:
182

Total Student Contact Hours:
182

Course Fee
25

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Counseling group dynamics theories
2. Counseling group dynamics techniques
3. Field experience

Explain the various types of group dynamics theories.

Explain the ethical and professional guidelines for group leaders.

Apply the various types of group dynamics techniques.

Co-lead a group therapy model in class.

Apply the various types of group dynamics techniques.

Demonstrate the use of family therapy techniques at a field experience.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of academic achievement may include, but not be limited to case studies, field experience reports, quizzes, research projects, research papers, group assignments, or final exam.

General Course Requirements and Recommendations
Students must have a cleared criminal background check within the last year.

Grading Scale
Students must earn at least 70% of the points available to earn a C grade.

Grading scale for exams and the final grade:

- 90% to 100% = A
- 80% to 89% = B
- 70% to 79% = C
- 60% to 69% = D
- 50% to 59% = E

Texts
To be determined by program faculty.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for HHS 201

HIST111 - Ancient World History

Overview

Subject
History

Academic Department
Social Sciences

School
Liberal Arts

Course Description
Covers the rise of civilization to the decline of major world civilizations in the early Common Era (c. 200 CE to c. 500 CE). Studies the ancient civilizations of Mesopotamia, Egypt, India, China, and the Greco-Roman world.

Course Pre-requisite(s)
Eligible to take ENG courses at HFC

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
10

Academic Level
Undergraduate

General Education Category
Social Sciences, Humanities and Fine Arts

Michigan Transfer Agreement (MTA) Category
Category 4: Social Sciences - Applied Degrees, Category 4: Social Sciences - Transfer Degrees, Category 5: Humanities and Fine Arts - Applied Degrees, Category 5: Humanities and Fine Arts - Transfer Degrees

Goals, Topics, and Objectives

Core Course Topics

1. Origins of civilization in Mesopotamia, Egypt, India, and China.
2. Survey of the history and culture of:
    - Mesopotamia
    - Egypt
    - The Hittites
    - The Levant (especially the Phoenicians and Hebrews)
    - India
    - China up to the fall of the Han Dynasty
    - The Greco-Roman world
3. Rise of the major world religions: Zoroastrianism, Judaism, Christianity, Hinduism, and Buddhism.
4. Interactions between civilizations, including but not limited to trade and conquest.
5. Chinese and Greek philosophy.
6. Development of Greco-Roman participative government, especially Athenian.

Outline the political and cultural history of the ancient civilizations of Mesopotamia, Egypt, India, China, and the Greco-Roman world.

Trace the development of civilization from hunting and gathering to cities and civilization, with emphasis on the origins of agriculture worldwide.

Trace the development of writing in Mesopotamia. Identify and give the significance of cuneiform, hieroglyphics, Chinese characters, and the alphabet.

Describe the various types of political organization in these early civilizations.

Identify and define a city-state, a kingdom, and an empire.

Tell how early states are different from the modern nation-state.

Describe Greek and Roman representative-participative government and one hypothesis of how it arose.

Compare and contrast the Greco-Roman systems to the U.S. government.

Describe the importance of written law. Identify and give the significance of the laws of Ur-Nammu (Sumerian), Hammurabi, and the Twelve Tables (Roman).

Identify the basic ideas of the ancient philosophies of China–Legalism, Daoism, and Confucianism.

Identify the basic ideas of the Mandate of Heaven and explain its significance in Chinese History.

Identify the basic ideas of the ancient philosophies of the Greeks – the Pre-Socratics, Sophists, Socrates, and his pupils.

Identify and give the significance of Socrates, Plato, and Aristotle.

Identify the basic ideas of Hinduism and Buddhism. Identify and give the significance of or define caste, dharma, karma, reincarnation, and Siddhartha Gautama.

Identify the basic ideas of Zoroastrianism, Hebrew ethical monotheism, and Christianity.

Identify and give the significance of Moses, Jesus of Nazareth, and Zoroaster. Define monotheism, monolatry, and polytheism.

Additional Learning Outcome information
Upon successful completion of this course, students should be able to:
1. Outline time and chronology in Ancient world history.
2. Identify, summarize, and analyze major elements of Ancient world history.
3. Analyze cause and effect in Ancient world history.
4. Trace elements of change and continuity in Ancient world history.
5. Emphasize parallelism by describing the impact of major events, personalities, and places upon Ancient world history.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of academic achievement will be identified and implemented by the class instructor. Methods will include, but will not be limited to, individual projects, vocabulary, class participation (discussion and critiques), and tests.

Texts
A good, world history text which is truly global and devotes significant material to non-Western history (including Mesopotamia and Egypt); or Monographs that contain significant non-Western, non-Judeo-Christian materials.

Supplemental materials should be non-Western whenever possible.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for HIST 111

HIST112 - Medieval-Early Modern World History

Overview

Subject
History

Academic Department
Social Sciences

School
Liberal Arts

Course Description
Presents world civilizations during the transition from the Ancient classical times to the Modern Period, i.e., the Medieval and Early Modern periods (c. 500 CE - c. 1650 CE). The world civilizations include China from the Sui to the early Qing dynasties; Japan from its origins to the early Tokugawa Shogunate; early Arabia, the rise of Islam, and the Umayyad, Abbasid, Seljuk, and Ottoman empires; the Mongol Empire; the Aztec and Incan civilizations; and the European Middle Ages, Renaissance, and Reformation.

Course Pre-requisite(s)
Eligible to take ENG courses at HFC.

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
10

Academic Level
Undergraduate

General Education Category
Social Sciences, Humanities and Fine Arts

Michigan Transfer Agreement (MTA) Category
Category 4: Social Sciences - Applied Degrees, Category 4: Social Sciences - Transfer Degrees, Category 5: Humanities and Fine Arts - Applied Degrees, Category 5: Humanities and Fine Arts - Transfer Degrees

Goals, Topics, and Objectives

Core Course Topics
1. Survey of the history and culture of:
    - Islam and the Islamic empires (Umayyad, Abbasid, Seljuk, and Ottoman)
    - Medieval Europe
    - China from the Tang to the early Qing Dynasty
    - Japan to the early Tokugawa Period
2. The Mongols, their place in and effect on Eurasian history
3. Interactions between civilizations and peoples, Old and New Worlds, including but not limited to trade and conquest
4. The Renaissance, its origins, development, and effects
5. The Reformation, its origins, development, and effects

Outline the political and cultural history of the civilizations of China, Sui to early Qing; Japan up to the early Tokugawa Shogunate; the Umayyad, Abbasid, Seljuk, Ottoman, and Mongol empires; the Aztec and Incan civilizations; and Europe through the Wars of Religion.

Describe the various types of political organization found in the Medieval and Early Modern periods and tell how they are different from the modern nation-state.

Identify, compare and contrast the basic ideas of Islam, Catholicism, Protestant Christianity, and Buddhism.

Describe the rise of Islam and the establishment of the Islamic Empire. Identify and give the significance of Mohammad, caliph, Sunni, Shia (Shi'ite), and the Umayyad and Abbasid Dynasties.

Identify and give the significance of the devshirme, Janissary Corps, sultan, Suleiman the Magnificent, and Sinan (Mimar Sinan).

Identify and give the significance of samurai, daimyo, shogun, Minomoto Yoritomo, the Fujiwara family, Oda Nobunaga, Hideyoshi, and Tokugawa Ieyasu.

Identify and give the significance of Khubilai Khan, Zhu Yuanzhang, Zheng He, and the Manchu.

Describe the feudal and manorial systems in Europe.

Describe the changes in European agriculture c.1000 CE and their effects on European society, including the revival of trade in Europe and the rise of commercial towns.

Describe the religious changes in Europe between c.1300 and c.1650. Identify and give the significance of John Wycliffe, the Pope, Martin Luther, John (Jean) Calvin, and the Council of Trent.

Identify and give the significance of Montezuma, Tenochtitlan, Atahualpa, Cuzco, Cortes, and Pizarro.

Identify and give the significance of the Peace of Augsburg and the Treaties (or Peace) of Westphalia. Identify their purposes, strengths, and weaknesses.

Additional Learning Outcome information
Upon successful completion of this course, students should be able to:

1. Outline time and chronology in Medieval and Early Modern world history.

2. Identify, summarize, and analyze major elements of Medieval and Early Modern world history.
3. Analyze cause and effect in Medieval and Early Modern world history.
4. Trace elements of change and continuity in Medieval and Early Modern world history.
5. Emphasize parallelism by describing the impact of major events, personalities, and places upon Medieval and Early Modern world history.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of academic achievement will be identified and implemented by the class instructor. Methods will include, but will not be limited to, individual projects, vocabulary, class participation (discussion and critiques), and tests.
Texts
One of the following:

- A good, world history text which is truly global and devotes significant material to non-Western history (China and the Islamic World)
- Monographs that contain significant non-Western, non-Judeo-Christian materials.

Supplemental materials should be non-Western whenever possible.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for HIST 112

HIST113 - Modern World History

Overview

Subject
History

Academic Department
Social Sciences

School
Liberal Arts

Course Description
Studies world civilizations from the seventeenth century to the present. Emphasizes the Scientific, Political, and Industrial Revolutions and their global impact. Also explores cultural and political events that have affected national or international politics, such as the Enlightenment, nationalism, imperialism, and communism.

Course Pre-requisite(s)
Eligible to take ENG courses at HFC.

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
10

Academic Level
Undergraduate

General Education Category
Social Sciences, Humanities and Fine Arts

Michigan Transfer Agreement (MTA) Category
Category 4: Social Sciences - Applied Degrees, Category 4: Social Sciences - Transfer Degrees, Category 5: Humanities and Fine Arts - Applied Degrees, Category 5: Humanities and Fine Arts - Transfer Degrees

Goals, Topics, and Objectives

Core Course Topics

1. Foundations of royal absolutism and the movement toward constitutionalism
2. Scientific Revolution and the Enlightenment
3. Africa 1500-1800: culture, economics, and the Islamic influence
4. Development of the Ottoman Empire, 1500-1800
5. Asia, 1500-1800: Chinese, Japanese, and Korean societies
6. Revolutions in the West, 1776-1870
7. The Industrial Revolution
8. Ideologies and consequences: nationalism, conservatism, and socialism
9. Western imperialism in Africa and Asia, 1800-1914
10. Prelude to and consequences of World War One
11. The post-Treaty of Versailles changes
12. The coming of World War Two: Communism, Fascism, and Nazism
13. Post-World War Two
14. Asia, Africa, and the developing countries in the twentieth century

Identify the foundations of royal absolutism and the movement toward constitutionalism.
Analyze the Scientific Revolution and the Enlightenment.
Describe and explain Africa between 1500 and 1800 in terms of its cultures, economies, and the Islamic influence.
Explain the development of the Ottoman Empire between 1500 and 1800.
Describe Asia between 1500-1800, focusing on Chinese, Japanese and Korean societies.
Analyze the revolutions in the West that occurred between 1776 and 1870.
Define and discuss the Industrial Revolution.
Compare and contrast the ideologies and consequences of nationalism, conservatism, and socialism.
Describe and explain Western imperialism in Africa and Asia between 1800 and 1914.
Explain the prelude to and consequences of World War One.
Describe the changes after the Treaty of Versailles.
Analyze the coming of World War Two, especially in terms of Communism, Fascism, and Nazism.
Explain the major aspects of Post-World War Two global societies.
Analyze Asia, Africa and the developing countries in the twentieth century.

Additional Learning Outcome information
Upon successful completion of this course, students should be able to:
1. Outline time and chronology in Modern World History.
2. Identify, summarize, and analyze major elements of Modern World History.
3. Analyze cause and effect in Modern World History.
4. Trace elements of change and continuity in Modern World History.
5. Emphasize parallelism by describing the impact of major events, personalities, and places upon Modern World History.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of academic achievement will be identified and implemented by the class instructor. Methods will include, but will not be limited to, individual projects, vocabulary, class participation (discussion and critiques), and tests.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for HIST 113

HIST151 - Early American History

Overview

Subject
History

Academic Department
Social Sciences

School
Liberal Arts

Course Description
Covers Colonial America and the United States through the Civil War Period.

Course Pre-requisite(s)
Eligible to take ENG courses at HFC.

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
10

Academic Level
Undergraduate

General Education Category
Social Sciences, Humanities and Fine Arts

Michigan Transfer Agreement (MTA) Category
Category 4: Social Sciences - Applied Degrees, Category 4: Social Sciences - Transfer Degrees, Category 5: Humanities and Fine Arts - Applied Degrees, Category 5: Humanities and Fine Arts - Transfer Degrees

Goals, Topics, and Objectives

Core Course Topics
1. Encounter between Old World and New
2. Colonial Expansion and Development
3. Coming of the American Revolution
4. Revolutionary War
5. Early National Period
6. The Empire of Liberty
7. Antebellum Politics and Society
8. Transformation of the US Economy
9. Manifest Destiny
10. Sectionalism and the Coming of the American Civil War
11. The Civil War
12. Reconstruction

Describe and discuss the impact of cultural contact between First Nations and Europeans in North America between 1500 and 1800.

Identify, summarize, and analyze major patterns of the Atlantic Slave Trade.

Trace the development of the United States political and economic system between the 1770s and the 1860s.

Analyze the causes and impacts of Manifest Destiny on the United States as well as the other peoples and cultures of North America.

Additional Learning Outcome information
Upon successful completion of this course, students should be able to:
1. Outline time and chronology in Early American History.
2. Identify, summarize, and analyze major elements of Early American History.
3. Analyze cause and effect in Early American History.
4. Trace elements of change and continuity in Early American History.
5. Emphasize parallelism by describing the impact of major events, personalities, and places upon Early American History.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of academic achievement will be identified and implemented by the class instructor. Methods will include, but will not be limited to, individual projects, vocabulary, class participation (discussion and critiques), and tests.

Texts
Each instructor will select the teaching materials she/he feels are best suited to her/his course.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for HIST 151

HIST152 - Modern American History

Overview

Subject
History

Academic Department
Social Sciences

School
Liberal Arts

Course Description
Covers the United States since the Civil War Period.

Course Pre-requisite(s)
Eligible to take ENG courses at HFC.

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
10

Academic Level
Undergraduate

General Education Category
Social Sciences, Humanities and Fine Arts

Michigan Transfer Agreement (MTA) Category
Category 4: Social Sciences - Applied Degrees, Category 4: Social Sciences - Transfer Degrees, Category 5: Humanities and Fine Arts - Applied Degrees, Category 5: Humanities and Fine Arts - Transfer Degrees

Goals, Topics, and Objectives

Core Course Topics
1. The Gilded Age
2. The American West
3. Immigration
4. Industrialization
5. The Progressive Era
6. World War One
7. Interwar Foreign Relations
8. The Great Depression
9. World War Two
10. The Cold War
11. Domestic America and the Postwar Boom
12. Deindustrialization and Economic Decline
13. Post-Cold War America
14. The War on Terrorism

Trace the changes brought to American society by immigration between the Civil War and the end of World War One.

Describe and explain the rise of the United States to hemispheric and then world power status between the Spanish-American War and World War Two.

Analyze changes in American politics from the Populist to Civil Rights Movements.

Identify the changes in the United States because of the rise of big business and the creation of an industrial and then post-industrial society in the 1990s.

Describe and explain how material life in the United States has changed the end of the Second World War.

Additional Learning Outcome information
Upon successful completion of this course, students should be able to:
1. Outline time and chronology in Modern American History.
2. Identify, summarize, and analyze major elements of Modern American History.
3. Analyze cause and effect in Modern American History.
4. Trace elements of change and continuity in Modern American History.
5. Emphasize parallelism by describing the impact of major events, personalities, and places upon Modern American History.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of academic achievement will be identified and implemented by the class instructor. Methods will include, but will not be limited to, individual projects, vocabulary, class participation (discussion and critiques), and tests.

Texts
Each instructor will select the teaching materials she/he feels are best suited to her/his course.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for HIST 152

HIST254 - History of Michigan

Overview

Subject
History

Academic Department
Social Sciences

School
Liberal Arts

Course Description
Presents a general survey of the historical development of Michigan from French exploration to the present. Studies the economic, social, and political development of the state as part of the history of the United States.

Course Pre-requisite(s)
Eligible to take ENG courses at HFC.

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
10

Academic Level
Undergraduate

General Education Category
Social Sciences, Humanities and Fine Arts

Michigan Transfer Agreement (MTA) Category
Category 4: Social Sciences - Applied Degrees, Category 4: Social Sciences - Transfer Degrees, Category 5: Humanities and Fine Arts - Applied Degrees, Category 5: Humanities and Fine Arts - Transfer Degrees

Goals, Topics, and Objectives

Course Goals
Provides a scholarly look into the social, economic, and political development of Michigan, starting with the civilizations of the First Nations who originally inhabited this state and continuing to the present day. Course also takes advantage of the exceptional historical resources available to students online and through local libraries and historical societies to examine the ways in which national events impacted local communities and provides a thorough understanding of the ways in which Michigan was affected by larger movements in Colonial American and US history. It also introduces students to the ways in which the discipline of history is practiced.

Core Course Topics

1. First Nations' Cultures and Life in the Colonial Era
2. Early French Colonial America
3. French Michigan in the 18th Century
4. Pontiac's War and the War for American Independence
5. The Birth of the United States and the State of Michigan
6. Economic Transition in the Nineteenth Century: Fur, Copper, Iron Ore, and Lumber
7. The Development of Antebellum American Culture and Its Impact on Michigan.
8. Michigan and the Civil War
9. The Emergence of Industrialization and the Factory System in Michigan
10. The Automobile Culture and Capitalism
11. Ford's Michigan
12. Michigan in the Twentieth Century and the Growth of Urban America
13. The Rise and Decline of Detroit
14. Civil Rights and Minorities in Michigan
15. Michigan in Transition in the Twenty-First Century: Demography, Education, and War

Outline time and chronology in Michigan history.

Identify, summarize, and analyze major elements of Michigan history.

Analyze cause and effect in Michigan history.

Trace elements of change and continuity in Michigan history.

Emphasize parallelism by describing the impact of major events, personalities, and places upon Michigan history.

Additional Learning Outcome information
Upon successful completion of this course, students should be able to:
1. Outline time and chronology in Michigan history.
2. Identify, summarize, and analyze major elements of Michigan history.
3. Analyze cause and effect in Michigan history.
4. Trace elements of change and continuity in Michigan history.
5. Emphasize parallelism by describing the impact of major events, personalities, and places upon Michigan history.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of academic achievement will be identified and implemented by the class instructor. Methods will include, but will not be limited to, individual projects, vocabulary, class participation (discussion and critiques), and tests.

Texts
These texts are only suggested. Individual instructors may choose other texts.

- Hyde, Charles K. The Dodge Brothers: The Men, the Motor Cars, and the Legacy. Detroit, MI: Wayne State University Press, 2005.
- Grimm, Joe, editor and compiler. Michigan Voices: Our State's History in the Words of the People Who Lived It. Detroit, MI: Detroit Free Press/Wayne State University Press, 1987.
- Rubenstein, Bruce A. and LawrenceE. Ziewacz. Michigan: A History of the Great Lake State. 4th edition. Wheeling, IL: Harlan Davidson, Inc., 2008.
- Sleeper-Smith, Susan. Indian Women and French Men: Rethinking Cultural Encounter in the Western Great Lakes. Amherst, MI: University of Massachusetts Press, 2001.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for HIST 254

HIST258 - The Revolutionary War Era

Overview

Subject
History

Academic Department
Social Sciences

School
Liberal Arts

Course Description
Offers a study of the American Revolutionary War, including the causes, personalities, social groups, military aspects, founding documents, and the legacy of America's formative period, 1754-1791.

Course Pre-requisite(s)
Eligible to take ENG courses at HFC.

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
10

Academic Level
Undergraduate

General Education Category
Social Sciences, Humanities and Fine Arts

Michigan Transfer Agreement (MTA) Category
Category 4: Social Sciences - Applied Degrees, Category 4: Social Sciences - Transfer Degrees, Category 5: Humanities and Fine Arts - Applied Degrees, Category 5: Humanities and Fine Arts - Transfer Degrees

Goals, Topics, and Objectives

Core Course Topics

1. Society and Politics on the Eve of the Revolution
2. The British Empire and the War for North America
3. British Reforms and Colonial Resistance
4. From the Tea Act to the Declaration of Independence
5. The Disappointments of 1776
6. The War Widens and Deepens
7. The Impact of the Winter at Valley Forge
8. George Washington: His Character and the Challenges He Faced
9. Outsiders and Enemies: Native Americans and Loyalists
10. The African-American Challenge
11. Gender, Citizenship, and Religious Tolerance in the Republic
12. Peacetime Government under the Articles of Confederation
13. The Constitutional Convention, Ratification, and the Bill of Rights
14. The Consequences of the Revolution

Identify the Social, Economic, and Political Conditions in the American Colonies at the Time of the Seven Years' War.

Explain the Issues and Positions that Separated Britain from those American Colonials who desired a Greater Measure of Self-Government in the Period following the Seven Years' War.

Recognize the Difficulties faced by the Continental Congress in Prosecuting a War amid a Largely Ambivalent Colonial Population and against the Leading Colonial Power of the World.

Describe the Immense Difficulties faced by American Generals, such as George Washington, in Successfully Creating, Training, and Commanding a Largely Civilian Army against British Regulars

Investigate the Issue of Slavery, the Conditions of Free African-Americans and the Calls for Emancipation during this Era.

Analyze the Revolutionaries' Perceptions of and Attitudes toward American Indians and Loyalists during the Revolutionary War.

Analyze the Impact of Gender and Citizenship in a Revolutionary Republic.

Investigate the Concept of Religious Freedom within the Predominantly Populated American Protestant Republic.

Describe the Articles of Confederation, including the Accomplishments and Deficiencies under that Government.

Identify the Personalities, Ideas and Compromises at Work, along with the Resulting Document Produced during the Constitutional Convention of 1787.

Analyze the Political Aspects of the Ratification of the Constitution, along with the Resultant Struggle for a Bill of Rights.

Assess the Consequences of the Revolutionary War Era and Its Impact upon American Life Today.

Additional Learning Outcome information
Upon successful completion of this course, students should be able to:
1. Outline time and chronology of the American Revolutionary War Era.
2. Identify, summarize, and analyze major elements of the American Revolutionary War Era.
3. Analyze cause and effect in the American Revolutionary War.
4. Trace elements of change and continuity in the American Revolutionary War Era.
5. Emphasize parallelism by describing the impact of major events, personalities, documents and places upon the American Revolutionary War Era.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of academic achievement will be identified and implemented by the class instructor. Methods will include, but will not be limited to, individual projects, vocabulary, class participation (discussion and critiques), and tests.

Texts
Each instructor will select the teaching materials she/he feels are best suited to her/his course.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for HIST 258

HIST261 - The Modern Middle East

Overview

Subject
History

Academic Department
Social Sciences

School
Liberal Arts

Course Description
Proceeding from the traditional civilizations in the Middle East, this course examines the impact of the industrialized powers, nationalism, industrialization, and religious and cultural change on the lands of the Middle East.

Course Pre-requisite(s)
Eligible to take ENG courses at HFC.

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
10

Academic Level
Undergraduate

General Education Category
Social Sciences, Humanities and Fine Arts

Michigan Transfer Agreement (MTA) Category
Category 4: Social Sciences - Applied Degrees, Category 4: Social Sciences - Transfer Degrees, Category 5: Humanities and Fine Arts - Transfer Degrees, Category 5: Humanities and Fine Arts - Applied Degrees

Goals, Topics, and Objectives

Core Course Topics

1. Ottoman Reforms in the 19th Century (Tanzimat)
2. Nationalist Movements in the Ottoman Empire
3. Britain, France, and Russia in the Middle East during the 19th Century
4. Egypt under Mohammed Ali
5. The Persian Empire during the Qajar Dynasty
6. The Constitutional Movements in the Ottoman & Persian Empires
7. World War I and the fall of the Ottoman Empire
8. The Middle East during the Interwar Period
9. Independence Movements in the Middle East after WWII
10. The Modern Middle East since the Cold War

Identify Ottoman Reforms in the 19th Century (Tanzimat).
Analyze Nationalist Movements in the Ottoman Empire.
Discuss the role of Britain, France, and Russia in the Middle East during the 19th Century.
Describe Egypt under Mohammed Ali.
Analyze the Persian Empire during the Qajar Dynasty.
Explain the constitutional movements in the Ottoman Persian Empires.
Analyze World War I and the fall of the Ottoman Empire.
Discuss the role of the Middle East during the Inter-War Period.
Describe independence movements in the Middle East after WWII.
Discuss the Modern Middle East since the Cold War.

Additional Learning Outcome information
Upon successful completion, students should be able to:
1. Outline time and chronology in Modern Middle Eastern History.
2. Identify, summarize, and analyze major elements of Modern Middle Eastern History.
3. Analyze cause and effect in Modern Middle Eastern History.
4. Trace elements of change and continuity in Modern Middle East History.
5. Emphasize parallelism by describing the impact of major events, personalities, and places upon Modern Middle Eastern History.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of academic achievement will be identified and implemented by the class instructor. Methods will include, but will not be limited to, individual projects, vocabulary, class participation (discussion and critiques), and tests.
Texts
Each instructor will select the teaching materials she/he feels are best suited to her/his course.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for HIST 261

HIST270 - The American Civil War

Overview

Subject
History

Academic Department
Social Sciences

School
Liberal Arts

Course Description
Examines the American Civil War, including the causes, personalities, soldiers, social groups, significant battles, and legacy of America's defining conflict from 1820-1877.

Course Pre-requisite(s)
Eligible to take ENG courses at HFC.

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
10

Academic Level
Undergraduate

General Education Category
Social Sciences, Humanities and Fine Arts

Michigan Transfer Agreement (MTA) Category
Category 4: Social Sciences - Applied Degrees, Category 4: Social Sciences - Transfer Degrees, Category 5: Humanities and Fine Arts - Applied Degrees, Category 5: Humanities and Fine Arts - Transfer Degrees

Goals, Topics, and Objectives

Core Course Topics

1. North and South Compared
2. Sectional Politics in the 1850s
3. The Secession Crisis
4. Fighting the War: The Generals
5. Fighting the War: The Soldiers
6. Abraham Lincoln as Military and Political Leader
7. Northern and Southern Home Fronts
8. Women in Wartime
9. Emancipation
10. Congressional Terms for the Defeated South
11. Political and Economic Change in the Reconstruction South
12. Southern Republicans and the Problems of Reconstruction
13. The Northern Retreat from Reconstruction
14. The Impact and Significance of the Sectional Conflict

Contrast and compare social, economic, and political conditions in the North and South.

Analyze the relationship between the competing forces of sectionalism and nationalism.

Identify the strategies, tactics and rationale of Northern and Southern generals as they fight the war and work with political officials.

Recognize the variety of forces affecting soldiers on both sides of the conflict, and the response of those soldiers.

Describe the evolution of the political and personal character of Abraham Lincoln as he responded to the needs of the Union.

Contrast the different wartime roles played by Northern and Southern women.

Analyze the ever-increasing dominance of emancipation and how it affected the leadership on both sides in their prosecution of the war.

Analyze the Constitutional and political arguments advanced for and against the return of the Southern states to the Union.

Identify the political and economic changes in the South brought about by Reconstruction.

Trace the evolution, success and decline of the fledgling Southern wing of the Republican Party.

Identify the reasons contributing to the Northern retreat from Reconstruction.

Recognize the impact and significance of the conflict between the North and South historically, politically, economically, and socially.

Additional Learning Outcome information
Upon successful completion of this course, a student should be able to:
1. Outline time and chronology of the American Civil War.
2. Identify, summarize, and analyze major elements of the American Civil War.
3. Analyze cause and effect in the American Civil War.
4. Trace elements of change and continuity in the American Civil War.
5. Emphasize parallelism by describing the impact of major events, personalities, and places upon the American Civil War.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of academic achievement will be identified and implemented by the class instructor. Methods will include, but will not be limited to, individual projects, vocabulary, class participation (discussion and critiques), and tests.

Texts
Each instructor will select the teaching materials she/he feels are best suited to her/his course.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for HIST 270

HIST285 - The U S and the Second World War

Overview

Subject
History

Academic Department
Social Sciences

School
Liberal Arts

Course Description
Studies the United States during World War II, including the causes, politicians and personalities, military aspects, home front, and legacy of the war that defined the latter half of the 20th century and established the US as a world leader (1935-1945).

Course Pre-requisite(s)
Eligible to take ENG courses at HFC.

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
10

Academic Level
Undergraduate

General Education Category
Social Sciences, Humanities and Fine Arts

Michigan Transfer Agreement (MTA) Category
Category 4: Social Sciences - Applied Degrees, Category 4: Social Sciences - Transfer Degrees, Category 5: Humanities and Fine Arts - Applied Degrees, Category 5: Humanities and Fine Arts - Transfer Degrees

Goals, Topics, and Objectives

Core Course Topics

1. From Neutrality to Assistance to Resistance
2. America Mobilizes for War
3. Creation of a Global Allied Strategy
4. The War Against Germany
5. The War Against Japan
6. The Home Front: Cooperation and Conflict
7. The War Affects and Changes American Culture
8. The Impact of Science and Intelligence
9. America and the Holocaust
10. FDR and Allied Diplomacy for War and Peace
11. The Atomic Bomb and the End of the War
12. The Legacy of World War II

Describe the impact of isolationism on the U.S. in the 1930s.

Identify the incidents, leaders, and forces in Europe and Asia that eventually drove America into mobilizing for war.

Analyze the efforts at diplomacy and the necessary military planning needed to formulate a strong Allied war strategy.

Identify and discuss the steps taken to develop an effective war strategy against Germany.

Identify and discuss the steps taken to develop an effective war strategy against Japan.

Identify elements of cooperation and conflict among fellow Americans on the Home Front during the war years.

Explain how wartime measures imposed by the American government impacted the American culture.

Discuss the impact of science and intelligence efforts that were implemented to win the war.

Describe the various American attitudes and reactions toward the Jewish people and toward the Holocaust.

Analyze the interwar and wartime diplomacy of FDR.

Distinguish between popularized accounts of World War II battles (such as Iwo Jima) and the actual strategies, dynamics, and results of this significant confrontation.

Identify the impact of the atomic bomb on the ending of the war in the Pacific.

Analyze and interpret the legacy of World War II in American History, culture, and society.

Additional Learning Outcome information
Upon successful completion of this course, students should be able to:
1. Outline time and chronology relating to America's participation in World War II.
2. Identify, summarize, and analyze major elements of the relating to America's participation in World War II.
3. Analyze cause and effect in American involvement during World War II.
4. Trace elements of change and continuity relating to the United States during World War II.
5. Emphasize parallelism by describing the impact of major domestic events, personalities, military operations, and places relating to American society during World War II.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of academic achievement will be identified and implemented by the class instructor. Methods will include, but will not be limited to, individual projects, vocabulary, class participation (discussion and critiques), and tests.

Texts
These texts are only suggestions. Individual instructors may choose different texts:Mark A. Stoler and Melanie S. Gustafson, Major Problems in the History of World War II (Boston: Houghton Miflin, 2003).William L. O'Neill, A Democracy at War: America's Fight at Home & Abroad in World War II (Cambridge, Massachusetts: Harvard University Press, 2002).Robert S. Burrell, The Ghosts of Iwo Jima (College Station,Texas: Texas A&M University, 2006).

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for HIST 285

HIST286 - The U S and the Vietnam War

Overview

Subject
History

Academic Department
Social Sciences

School
Liberal Arts

Course Description
Traces the causation factors leading to the escalation of U.S. involvement in the Vietnam conflict from 1945 until 1975. Emphasizes the political, diplomatic, and military strategy of the United States within the historical context of colonial rule over Vietnam, as well as the struggle for Vietnamese nationalism.

Course Pre-requisite(s)
Eligible to take ENG courses at HFC.

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
10

Academic Level
Undergraduate

General Education Category
Social Sciences, Humanities and Fine Arts

Michigan Transfer Agreement (MTA) Category
Category 4: Social Sciences - Applied Degrees, Category 4: Social Sciences - Transfer Degrees, Category 5: Humanities and Fine Arts - Applied Degrees, Category 5: Humanities and Fine Arts - Transfer Degrees

Goals, Topics, and Objectives

Core Course Topics

1. The Rise of Vietnamese Nationalism
2. The Japanese Occupation
3. The French Colonial Era
4. The Road to Dien Bien Phu
5. Diem Takes Charge
6. America Goes to War
7. Student Research Project
8. Cold War Crises
9. The Concept of Limited War
10. War at Home
11. Nixon and Kissinger
12. Expanding the War
13. War Weariness
14. The American Antiwar Movement
15. Withdrawal and Postwar
16. Final Research Project

Describe the geography of Indochina.

Outline Vietnamese culture and heritage.

Identify the various factors contributing to the development of Vietnamese Nationalism.

Describe the important contributions of Ho Chi Minh with regard to the rise of Vietnamese Nationalism.

Identify the factors which brought about the Japanese occupation of Indochina beginning in 1940.

Discuss the organizational and ideological foundation of the Vietminh.

Describe the political and diplomatic factors associated with the initial involvement of the U.S. in Indochina.

Identify the main events and circumstances regarding the August Revolution and the emergence of Vietnamese independence in 1945.

Identify the major factors leading to the French Colonial Era in Indochina.

Discuss the changes to Vietnam brought about by French rule.

Describe the changes in the Vietnamese social structure and intellectual outlook leading up to the Vietnamese Revolution of 1945

Summarize the major factors leading to the Franco-Vietminh War.

Discuss the various factors regarding the Franco-American partnership and the impact it had on post-World War II Southeast Asian policy.

Describe the military strategies used by the French and the Vietminh forces at Dien Bien Phu.

List the major components of the Geneva Accords of 1954.

Describe the background of Ngo Dinh Diem.

Compare and contrast the American effort in nation-building in southern Vietnam with the process utilized by Ho Chi Minh in the north.

Discuss how the Eisenhower Administration's economic, military, and political support for Diem's government proved insufficient to create a viable nation.

Summarize the basic international perceptions with regards to the expanding involvement of the United States in Southeast Asia.

Describe and explain the various factors surrounding the Gulf of Tonkin Incident in August 1964.

Analyze the decisions made by President Johnson and his advisers regarding U.S. policy and involvement in Vietnam.

Analyze the various aspects of Cold War dynamics during the Kennedy Administration.

Analyze and summarize the various factors which helped the NLF succeed in creating a social revolution in South Vietnam.

Identify and analyze the various factors associated with the collapse of Ngo Dinh Diem and his regime.

Compare and contrast the positive and negative perceptions of the actions and policy decisions taken by John F. Kennedy with regard to U.S. intervention in Vietnam

Evaluate the military strategies used by the U.S. during the early phase of the war.

Identify and evaluate the rationale for the strategy known as "Rolling Thunder."

Summarize the military and diplomatic impact of the Tet Offensive.

Describe the impact and influence of Secretary of Defense Clark Clifford on the war effort and U.S. policy on Vietnam.

Evaluate the influence of the media, particularly the televised coverage of events taking place in Vietnam.

Compare and contrast the diplomatic moves and the military encounters occurring during the later phases of the war.

Identify the significant factors regarding the 1968 election.

Identify the diplomatic and military strategies of Richard Nixon and Henry Kissinger.

Describe the concept of Vietnamization as outlined by the Nixon Administration.

Describe the apparent flaws in Nixon's Vietnam policies.

Explain the U.S war effort in Cambodia.

Outline the U.S. war effort in Laos.

Analyze the effects of the tragedy at Kent State University on U.S. policy-making with regard to the Vietnam Conflict.

Evaluate the role of Communist China, with regard to North Vietnam, from 1965-1968.

Identify the various groups within the antiwar movement and explain the ideology of each group.

Describe the role that women played as important figures in the antiwar movement.

Analyze and evaluate whether or not the antiwar movement was successful in shortening or ending the war.

Identify the various factors leading to the fall of South Vietnam after the withdrawal of American troops.

Discuss and evaluate the impact of the Watergate scandal on U.S. involvement in Southeast Asia.

Describe and analyze the economic and political changes in Vietnam after the Communist takeover in 1975.

Summarize the economic, political, and human costs to the United States in the aftermath of the Vietnam War.

Additional Learning Outcome information
Upon successful completion of this course, students should be able to:
1. Outline time and chronology with regard to the Vietnam Era.
2. Identify, summarize, and analyze major elements regarding the evolution of U.S./Vietnamese interaction.
3. Analyze cause and effect in the escalation of the involvement of the U.S. in the Vietnam Conflict.
4. Trace elements of change and continuity with regard to the Vietnam Conflict.
5. Emphasize parallelism by describing the impact of major events, personalities, and places with regard to the Vietnam Conflict.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of academic achievement will be identified and implemented by the class instructor. Methods will include, but will not be limited to, individual projects, vocabulary, class participation (discussion and critiques), and tests.

Texts
These texts are only suggestions. Individual instructors may choose different texts:

- Textbook: Vietnam: An American Ordeal, 4th edition. By George Donelson Moss. Prentice Hall Publishing.
- Supplemental Textbooks:
  - Major Problems in the History of the Vietnam War, 3rd edition. By Robert J. McMahon. Houghton Mifflin Publishing.
  - The Origins of the Vietnam War, Seminar Studies in History. By Fredrik Logevall, Longman Publishing.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for HIST 286

HIT150 - Basic Coding: Theory and Practice

Overview

Subject
Medical Office Assistant

Academic Department
Health, Education, and Human Services

School
Health & Human Services

Course Description
An intermediate-level coding class that incorporates hands-on practice in the assignment of insurance codes using case studies and medical record simulations. Presents theory and practice of coding diseases and procedures using International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) for inpatient facilities. Explores the Prospective Payment System (PPS) and the significance of Diagnosis Related Groupings (DRG). This course utilizes electronic and paper-based medical documentation to serve as resources for coding for inpatient reimbursement, and the application of all federal laws related to patient health information in the process of medical business practices.

Course Pre-requisite(s)
MOA101 Admin Medical Procedures I and MOA110 Process Hlth Insurance Claims both with a C grade or higher.

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
62

Total Student Contact Hours:
62

Course Fee
60

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Licensure/certifications

Credit for Prior College Level Learning (CPCLL) Details
Licensure/Certification

Certified Professional Coder (CPC)

Licensure/Certification Details

CPC certification must be current. Department faculty will verify certification.

Goals, Topics, and Objectives

Core Course Topics

1. Medical Documentation
2. Principles of Confidentiality of Medical Records
3. Coding Procedures, Signs, Symptoms
4. Basics of Coding to ICD-10-CM
5. Coding According to Body Systems
6. The Prospective Payment System
7. Coding for Obstetrical Conditions
8. Coding for Cardiovascular Conditions
9. Coding for Neoplasm
10. Coding for Injuries
11. Coding for Adverse Effects and Poisoning
12. V Coding and E Coding
13. Coding for Medical Complications

Apply the principles of coding according to ICD-10-CM for inpatient reimbursement.

Identify key items that require code assignment from the medical documentation and apply the correct codes.

Apply the principles of selection diagnoses and principle procedure code selection along with complications and co-morbidities.

Group coded items using existing software to arrive at the correct Diagnosis Related Grouping (DRG) and therefore optimum reimbursement for a given medical case study.

Explain the importance of the principles of confidentiality of medical information to include federal and state regulations.

Identify key contributing factor of a medical chart and explain the meaning behind it.

Explain the guidelines associated with each chapter of the ICD-10-CM.

Identify principle diagnoses and reason for the visit, and know the difference.

Explain present on admission (POA).

Perform coding procedures using legal and ethical standards of the profession.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of academic achievement will include participation, assignments, examinations and final exam.

Assessment activities will use the following weighted percentages:
Professionalism/Participation; 10%
Assignments;30%
Examinations; 30%
Final Examination;30%

General Course Requirements and Recommendations
Although not a prerequisite, it is highly recommended that students take BIO 134 (Essentials of Anatomy and Physiology) prior to taking HIT 150. This information is the required knowledge necessary to code procedures and diagnostic statements using the ICD-10CM/ Current Procedural Terminology (CPT) coding system and to improve success on the national board exam certification examination.

1. Make-up exam policy: The student will arrange to make up any missed examinations at the convenience of the instructor, to be completed before the next class session.
2. Attendance: Student attendance is required for each class. Class will consist of application exercises and discussion along with computer laboratory exercises. These experiences cannot be made up.
3. Although students are encouraged to discuss coding homework as a learning exercise, students will not furnish answers to classmates who have not done their homework.
4. If a student misses a class meeting, it is his/her responsibility to gather needed materials and information.
5. A student who is considering withdrawal from this course they should speak with the instructor first and follow the guidelines established in the HFC catalog.

Grading Scale
Student grades will be assigned using the following scale:

- 98-100% = A+
- 93-97% = A
- 90-92% = A-
- 87-89% = B+
- 83-86% = B
- 80-82% = B-
- 76-79% = C+
- 70-75% = C
- 67-69% = D+
- 63-66% = D
- 60-62% = D-
- 59% & below = E

Texts
Required textbooks to be determined through departmental approval.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for HIT 150

HIT151 - Basic Medical Coding: Theory & Practice

Overview

Subject
Medical Office Assistant

Academic Department
Health, Education, and Human Services

School
Health & Human Services

Course Description
An introductory to intermediate-level coding class that incorporates hands-on practice in the assignment of insurance codes using case studies and medical record simulations. Presents theory and practice of coding diseases and procedures using International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) for inpatient facilities. Explores the Prospective Payment System (PPS) and the significance of Diagnosis Related Groupings (DRG). This course utilizes electronic and paper-based medical documentation to serve as resources for coding for inpatient reimbursement, and the application of all federal laws related to patient health information in the process of medical business practices.

Course Pre-requisite(s)
AH100 Medical Terminology C grade or higher taken prior or at the same time

Credit Hours
4

Total Contact Hours
Total Instructor Contact Hours:
62

Total Student Contact Hours:
62

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Licensure/certifications

Credit for Prior College Level Learning (CPCLL) Details
Licensure/Certification

Certified Professional Coder (CPC)

Licensure/Certification Details

CPC certification must be current. Department faculty will verify certification.

Goals, Topics, and Objectives

Core Course Topics

1. Medical Documentation
2. Principles of Confidentiality of Medical Records
3. Coding Procedures, Signs, Symptoms
4. Basics of Coding to ICD-10-CM
5. Coding According to Body Systems
6. The Prospective Payment System
7. Coding for Obstetrical Conditions
8. Coding for Cardiovascular Conditions
9. Coding for Neoplasm
10. Coding for Injuries
11. Coding for Adverse Effects and Poisoning
12. Coding for Medical Complications

Apply the principles of coding according to ICD-10-CM for inpatient reimbursement.
Identify key items that require code assignment from the medical documentation and apply the correct codes.
Apply the principles of selection diagnoses and principle procedure code selection along with complications and co-morbidities.
Group coded items using existing software to arrive at the correct Diagnosis Related Grouping (DRG) and therefore optimum reimbursement for a given medical case study.
Explain the importance of the principles of confidentiality of medical information to include federal and state regulations.
Identify key contributing factor of a medical chart and explain the meaning behind it.
Explain the guidelines associated with each chapter of the ICD-10-CM.
Identify principle diagnoses and reason for the visit, and know the difference.
Explain present on admission (POA).
Perform coding procedures using legal and ethical standards of the profession.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of academic achievement will include participation, assignments, examinations and final exam.

Assessment activities will use the following weighted percentages:
Professionalism/Participation-10%
Assignments-30%
Examinations-30%
Final Examination-30%

General Course Requirements and Recommendations
Although not a prerequisite, it is highly recommended that students take BIO 134 (Essentials of Anatomy and Physiology) prior to taking HIT 151. This information is the required knowledge necessary to code procedures and diagnostic statements using the ICD-10CM/ Current Procedural Terminology (CPT) coding system and to improve success on the national board exam certification examination.

Make-up exam policy: The student will need to contact the instructor prior to the scheduled time of the exam arrange to make up any missed examinations. Class will consist of application exercises and discussion along with computer exercises. Although students are encouraged to discuss coding homework as a learning exercise, students will not furnish answers to classmates who have not done their homework. Student who is considering withdrawal from this course they should speak with the instructor first and follow the guidelines established in the HFC catalog.

Grading Scale
Student grades will be assigned using the following scale:
98-100% = A+
93-97% = A
90-92% = A-
87-89% = B+
83-86% = B
80-82% = B-
76-79% = C+
70-75% = C
67-69% = D+
63-66% = D
60-62% = D-
59% & below = E

Texts
Required textbooks to be determined through departmental approval.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for HIT 151

HIT230 - Ambulatory Coding

Overview

Subject
Medical Office Assistant

Academic Department
Health, Education, and Human Services

School
Health & Human Services

Course Description
Examines the theory and practice of coding techniques and coding systems used to capture billing data for care given to patients in settings other than acute care. Settings include but may not be limited to ambulatory surgery, emergency care, outpatient care, long term care, observation, and care rendered by health care practitioners especially physicians.

Course Pre-requisite(s)
HIT151 Basic Med Coding: Theory/Practwith a C grade or higher.

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
15

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Licensure/certifications

Credit for Prior College Level Learning (CPCLL) Details
Licensure/Certification

Certified Professional Coder (CPC)

Licensure/Certification Details

CPC certification must be current. Department faculty will verify certification.

Goals, Topics, and Objectives

Core Course Topics
1. Introduction to Current Procedural Terminology (CPT)/Healthcare Common Procedure Coding System (HCPCS) Coding
2. Surgical Procedure Coding
3. Radiology Coding
4. Laboratory and Pathology Coding
5. Anesthesia and Medicine Coding
6. Evaluation and Management Coding
7. Coding Applicable to Observation Care
8. Coding Applicable to Long Term Care
9. Coding Applicable to Emergency Care
10. International Classification of Diseases, Tenth Edition, Clinical Modification (ICD-10-CM) Codes

Explain the format and coding conventions of CPT/HCPCS coding.

Apply CPT/HCPCS codes to information from medical record simulations.

Apply the ICD-10-CM coding system to all diagnostic conditions and procedural services being evaluated for financial reimbursement.

Interpret the documentation found in a medical record and apply the correct code.

Utilize the Encoder-Pro medical software coding system to arrive at correct codes.

Assign appropriate Ambulatory Procedure Code (APC) to medical documentation.

Demonstrate honesty and integrity in the assignment of codes for reimbursement.

Recognize coding errors contribute to waste and fraud.

Perform coding using ethical and legal standards of professional behavior.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of achievement will be determined using participation, assignments, lab exercises, case studies, examinations and final examination. Assessment activities will use the following weighted percentages: Professionalism/Participation; 10% Case Studies/Assignments; 30% Examinations; 30% Final Examination; 30%
General Course Requirements and Recommendations
1. Make-up exam policy: The student will arrange to make up any missed examinations at the convenience of the instructor, to be completed before the next class session.
2. Attendance: Student attendance is required for each class. Class will consist of application exercises and discussion along with computer laboratory exercises. These experiences cannot be made up.
3. Although students are encouraged to discuss coding homework as a learning exercise, students will not furnish answers to classmates who have not done their homework.
4. If a student misses a class meeting, it is his/her responsibility to gather needed materials and information.
5. A student who is considering withdrawal from this course they should speak with the instructor first and follow the guidelines established in the HFC catalog.

Grading Scale
Student grades will be assigned using the following scale:

- 98-100% = A+
- 93-97% = A
- 90-92% = A-
- 87-89% = B+
- 83-86% = B
- 80-82% = B-
- 76-79% = C+
- 70-75% = C
- 67-69% = D+
- 63-66% = D
- 60-62% = D-
- 59% & below = E

Texts
Required textbooks to be determined through departmental approval.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for HIT 230

HON151 - Honor Colloquium-History Culture Detroit

Overview

Subject
Honors Program

Academic Department
Honors

School
Liberal Arts

Course Description
An interdisciplinary humanities course that examines the history and culture of Detroit.

Course Pre-requisite(s)
Honors Program Acceptance

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
10

Academic Level
Undergraduate

General Education Category
Humanities and Fine Arts

Michigan Transfer Agreement (MTA) Category
Category 5: Humanities and Fine Arts - Applied Degrees, Category 5: Humanities and Fine Arts - Transfer Degrees

Goals, Topics, and Objectives

Course Goals
A primary objective of the course is to encourage a sense of community among honors students and to provide a forum for the exchange of ideas among them. In addition, the course attempts to encourage students to develop an appreciation of the relationships among several academic disciplines and to broaden and intensify students' intellectual interests.

Core Course Topics

1. The City of Detroit: This Colloquium explores the city of Detroit as a landmark of industrial development, labor activism, and cultural complexity.

   The course focuses on distinctive individuals, significant institutions, and artistic achievements central to the evolution of Detroit through the nineteenth, twentieth, and twenty-first centuries.

Describe a particular social, economic, political or cultural problem within a variety of contexts.
Evaluate the commentary of classmates, as well as the remarks of not only the assigned instructor but visiting lecturers within a seminar context.
Analyze the socio-economic and cultural issues that have and continue to shape the city of Detroit and surrounding region.
Compose an essay or presentation that includes a detailed summary, explicit interpretation, and rigorous evaluation of at least one of the seminar's principal texts.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement

- 1,500 word (minimum) seminar essay
- A minimum of four in-class essays and/or journal commentaries
- Final presentation

General Course Requirements and Recommendations
The Honors Colloquium is organized by a member of the Honors faculty around a humanities theme. Typically, the convener enlists participation of other faculty from across the College to present guest lectures on an overarching theme. Students are exposed to a wide variety of perspectives and diverse topics, as well as teaching styles, through:

- Lectures on the context and themes given by various HFC faculty speaking in their areas of expertise and special interest
- Classroom discussion
- Reading assignments
- Site visits to area exhibitions, performances, etc.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for HON 151

HON161 - Honors Colloquium

Overview

Subject
Honors Program

Academic Department
Honors

School
Liberal Arts

Course Description
An interdisciplinary humanities course that examines a given topic or problem from a variety of approaches.

Course Pre-requisite(s)
Honors Program Acceptance

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Academic Level
Undergraduate

General Education Category
Humanities and Fine Arts

Michigan Transfer Agreement (MTA) Category
Category 5: Humanities and Fine Arts - Transfer Degrees

Goals, Topics, and Objectives

Course Goals
A primary objective of the course is to encourage a sense of community among honors students and to provide a forum for the exchange of ideas among them. In addition, the course attempts to encourage students to develop an appreciation of the relationships among several academic disciplines and to broaden and intensify students' intellectual interests.

Core Course Topics

1. Topic listed below.

   Colloquium themes (chosen by an instructor appointed by the Honors Council) have included, for example, "American Foreign Policy," "Immigration," "Work Ethics," "The Culture of Consumerism."

Describe a particular social, scientific, or artistic problem within a variety of contexts.
Evaluate the commentary of classmates, as well as the remarks of not only the assigned instructor but also visiting lecturers within a seminar context.
Analyze the organizing principle of the Colloquium within both historical and contemporary frameworks.*
Compose an essay that includes a detailed summary, explicit interpretation, and rigorous evaluation of at least one of the seminar's principal texts.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement

- 1,500-word (minimum) seminar essay
- A minimum of four in-class essays and/or journal commentaries
- Final exam

General Course Requirements and Recommendations
The Honors Colloquium is organized by a member of the Honors faculty around a humanities theme. Typically, the convener enlists participation of other faculty from across the College to present guest lectures on an overarching theme. Students are exposed to a wide variety of faculty and diverse topics, as well as teaching styles, through:

- Lectures on the context and themes given by various HFC faculty speaking in their areas of expertise and special interest
- Classroom discussion
- Reading assignments
- Site visits to area exhibitions, performances, etc.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for HON 161

HON231 - Honors Directed Study

Overview

Subject
Honors Program

Academic Department
Honors

School
Liberal Arts

Course Description
Challenges sophomore students to apply knowledge and research skills acquired in their freshman year in the Honors Program. Students work individually with a faculty member of their choice on a mutually-agreed-upon study topic. Coursework includes presenting a research summary before a meeting of Honors Program students and faculty at the end of each semester.

Course Pre-requisite(s)
Permission from the Honors Program Director

Course Co-requisite(s)
Honors Program Acceptance

Credit Hours
1

Total Contact Hours

Total Instructor Contact Hours:
16

Total Student Contact Hours:
16

Course Fee
10

Academic Level
Undergraduate

Goals, Topics, and Objectives

Course Goals
The Honors directed study aims to deepen students' interests in topics while strengthening their research and oral presentation skills as a way of preparing them for continued studies at transfer institutions.

Core Course Topics
Varies by academic field and discipline of the HP faculty willing to offer HP directed studies.

Course objectives determined by the individual instructor and stipulated in a written "Student Contract". See Course Requirements under XII/XIII below for detailed steps.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement

- Student produces agreed upon project(s).
- Project is presented in summary form to an assembly of students and faculty.
- Student writes a 400 word (max.) abstract summarizing the project for distribution to the Honors Day Student Presentation assembly held at the end of the semester or makes a formal presentation of his/her research before public forum.

General Course Requirements and Recommendations

- The instructor will plan to meet with the student one hour per week for fifteen weeks. Missed sessions will be made up.
- Individual faculty determine the assignments and projects the student will undertake in collaboration with the student.
- Each instructor will draw up a contract (using the basic outlines of a course syllabus). The HP Directed Study contract will stipulate what is expected of both the instructor and the student in terms of readings, project goal, and the specific due dates for completion of the readings and the project(s).
- It is highly recommended that due dates be determined for various stages of the project in addition to the final completion date, so that the student may receive critical feedback as well as avoid procrastination.
- The instructor presents a progress report and distributes the contract to a meeting of Honors faculty during the semester.
- Students enrolled in Honors Directed Studies will read at least one influential work in the discipline of the instructor offering the Directed Study. An "influential work" is a work that has had a major impact on the discipline or on scholarship in general. At the discretion of the instructor, the student will read the work in whole or in part. The purpose of this requirement is to introduce students to the seminal figures in various disciplines as well as the nature, rigor, and breadth of scholarly works.
- Working under the supervision of the Honors Directed Study instructor, students also will work on a project(s) that will engage his/her analytical and research skills as well as result in a tangible outcome or product. The outcome may be a written paper, or any other tangible product suitable to the particular discipline in which the Directed Study is given (technical projects, creative writing, studio art, musical recital, audio or visual works, experimental research projects, business plans, etc.).
- The student will present and make available an abstract of his/her reading(s) and project(s) before a gathering of Honors Program students and faculty. The last Friday of each semester (Fall and Winter) will be set aside for this purpose.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for HON 231

HON232 - Honors Directed Study

Overview

Subject
Honors Program

Academic Department
Honors

School
Liberal Arts

Course Description
In this sophomore-level directed study, students are challenged to apply the knowledge and research skills acquired in their freshman year in the Honors Program. Students work individually with a faculty member of their choice on a mutually-agreed-upon study topic. Students present summaries of their research before a meeting of Honors Program students and faculty held at the end of each semester.

Course Pre-requisite(s)
Permission of the Honors Program Director; completion of HON231 Honors Directed Study with a C or better

Course Co-requisite(s)
Honors Program Acceptance

Credit Hours
1

Total Contact Hours
Total Instructor Contact Hours:
16

Total Student Contact Hours:
16

Course Fee
10

Academic Level
Undergraduate

Goals, Topics, and Objectives

Course Goals
The Honors directed study aims to deepen students' interests in topics while strengthening their research and oral presentation skills as a way of preparing them for continued studies at transfer institutions. , basic_html

Core Course Topics
Varies by academic field and discipline of the HP faculty willing to offer HP directed studies.

Course objectives determined by the individual instructor and stipulated in a written "Student Contract". See Course Requirements under XII/XIII below for detailed steps.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement

- Student produces agreed upon project(s).
- Project is presented in summary form to an assembly of students and faculty.
- Student writes a 400 word (maximum) abstract summarizing the project for distribution to the Honors Day Student Presentation assembly held at the end of the semester. Or, makes a formal presentation of his/her research before public forum.

General Course Requirements and Recommendations

- The instructor will plan to meet with the student one hour per week for fifteen weeks. Missed sessions will be made up.
- Individual faculty determine the assignments and projects the student will undertake in collaboration with the student.
- Each instructor will draw up a "contract" (using the basic outlines of a course syllabus). The HP Directed Study contract will stipulate what is expected of both the instructor and the student in terms of readings, project goal, and the specific due dates for completion of the readings and the project(s).
- It is highly recommended that due dates be determined for various stages of the project in addition to the final completion date, so that the student may receive critical feedback as well as avoid procrastination.
- The instructor presents a progress report and distributes the contract to a meeting of Honors faculty during the semester.
- Students enrolled in Honors Directed Studies will read at least one influential work in the discipline of the instructor offering the Directed Study. An "influential work" is a work that has had a major impact on the discipline or on scholarship in general. At the discretion of the instructor, the student will read the work in whole or in part. The purpose of this requirement is to introduce students to the seminal figures in various disciplines as well as the nature, rigor, and breadth of scholarly works.
- Working under the supervision of the Honors Directed Study instructor, students also will work on a project(s) that will engage their analytical and research skills as well as result in a tangible outcome or product. The outcome may be a written paper, or any other tangible product suitable to the particular discipline in which the Directed Study is given (technical projects, creative writing, studio art, musical recital, audio or visual works, experimental research projects, business plans, etc.).
- The student will present and make available an abstract of his/her reading(s) and project(s) before a gathering of Honors Program students and faculty. The last Friday of each semester (Fall and Winter) will be set aside for this purpose.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for HON 232

HON233 - Honors Directed Study

Overview

Subject
Honors Program

Academic Department
Honors

School
Liberal Arts

Course Description
In this sophomore-level directed study, students are challenged to apply the knowledge and research skills acquired in their freshman year in the Honors Program. Students work individually with a faculty member of their choice on a mutually-agreed-upon study topic. Students present summaries of their research before a meeting of Honors Program students and faculty held at the end of each semester.

Course Pre-requisite(s)
Completion of HON231 Honors Directed Study & HON232 Honors Directed Study with a C or better

Course Co-requisite(s)
Honors Accepted Program

Credit Hours
1

Total Contact Hours
Total Instructor Contact Hours:
16

Total Student Contact Hours:
16

Course Fee
10

Academic Level
Undergraduate

Goals, Topics, and Objectives

Course Goals
he Honors directed study aims to deepen students' interests in topics while strengthening their research and oral presentation skills as a way of preparing them for continued studies at transfer institutions.

Core Course Topics
Varies by academic field and discipline of the HP faculty willing to offer HP directed studies.

Course objectives determined by the individual instructor and stipulated in a written "Student Contract." See Course Requirements under XII/XIII below for detailed steps.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement

- Student produces agreed upon project(s).
- Project is presented in summary form to an assembly of students and faculty.
- Student writes a 400 word (maximum) abstract summarizing the project for distribution to the Honors Day Student Presentation assembly held at the end of the semester. Or, makes a formal presentation of his/her research before public forum.

General Course Requirements and Recommendations

- The instructor will plan to meet with the student one hour per week for fifteen weeks. Missed sessions will be made up.
- Individual faculty determine the assignments and projects the student will undertake in collaboration with the student.
- Each instructor will draw up a "contract" (using the basic outlines of a course syllabus). The HP Directed Study contract will stipulate what is expected of both the instructor and the student in terms of readings, project goal, and the specific due dates for completion of the readings and the project(s).
- It is highly recommended that due dates be determined for various stages of the project in addition to the final completion date, so that the student may receive critical feedback as well as avoid procrastination.
- The instructor presents a progress report and distributes the contract to a meeting of Honors faculty during the semester.
- Students enrolled in Honors Directed Studies will read at least one influential work in the discipline of the instructor offering the Directed Study. An "influential work" is a work that has had a major impact on the discipline or on scholarship in general. At the discretion of the instructor, the student will read the work in whole or in part. The purpose of this requirement is to introduce students to the seminal figures in various disciplines as well as the nature, rigor, and breadth of scholarly works.
- Working under the supervision of the Honors Directed Study instructor, students also will work on a project(s) that will engage their analytical and research skills as well as result in a tangible outcome or product. The outcome may be a written paper, or any other tangible product suitable to the particular discipline in which the Directed Study is given (technical projects, creative writing, studio art, musical recital, audio or visual works, experimental research projects, business plans, etc.).
- The student will present and make available an abstract of his/her reading(s) and project(s) before a gathering of Honors Program students and faculty. The last Friday of each semester (Fall and Winter) will be set aside for this purpose.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for HON 233

HON234 - Honors Directed Study

Overview

Subject
Honors Program

Academic Department
Honors

School
Liberal Arts

Course Description
In this sophomore-level directed study, students are challenged to apply the knowledge and research skills acquired in their freshman year in the Honors Program. Students work individually with a faculty member of their choice on a mutually-agreed upon study topic. Students present summaries of their research before a meeting of Honors Program students and faculty held at the end of each semester.

Course Pre-requisite(s)
HON231 Honors Directed Study, HON232 Honors Directed Study, and HON233 Honors Directed Study with a C or better

Course Co-requisite(s)
Honors Program Acceptance

Credit Hours
1

Total Contact Hours
Total Instructor Contact Hours:
16

Total Student Contact Hours:
16

Course Fee
10

Academic Level
Undergraduate

Goals, Topics, and Objectives

Course Goals
The Honors directed study aims to deepen students' interests in topics while strengthening their research and oral presentation skills as a way of preparing them for continued studies at transfer institutions.

Core Course Topics
Varies by academic field and discipline of the HP faculty willing to offer HP directed studies.

Course objectives determined by the individual instructor and stipulated in a written "Student Contract." See Course Requirements under XII/XIII below for detailed steps.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement

- Student produces agreed upon project(s).
- Project is presented in summary form to an assembly of students and faculty.
- Student writes a 400 word (maximum) abstract summarizing the project for distribution to the Honors Day Student Presentation assembly held at the end of the semester. Or, conversely, makes a formal presentation of his/her research before public forum.

General Course Requirements and Recommendations

- The instructor will plan to meet with the student one hour per week for fifteen weeks. Missed sessions will be made up.
- Individual faculty determine the assignments and projects the student will undertake in collaboration with the student.
- Each instructor will draw up a "contract" (using the basic outlines of a course syllabus). The HP Directed Study contract will stipulate what is expected of both the instructor and the student in terms of readings, project goal, and the specific due dates for completion of the readings and the project(s).
- It is highly recommended that due dates be determined for various stages of the project in addition to the final completion date, so that the student may receive critical feedback as well as avoid procrastination.
- The instructor presents a progress report and distributes the contract to a meeting of Honors faculty during the semester.
- Students enrolled in Honors Directed Studies will read at least one influential work in the discipline of the instructor offering the Directed Study. An "influential work" is a work that has had a major impact on the discipline or on scholarship in general. At the discretion of the instructor, the student will read the work in whole or in part. The purpose of this requirement is to introduce students to the seminal figures in various disciplines as well as the nature, rigor, and breadth of scholarly works.
- Working under the supervision of the Honors Directed Study instructor, students also will work on a project(s) that will engage their analytical and research skills as well as result in a tangible outcome or product. The outcome may be a written paper, or any other tangible product suitable to the particular discipline in which the Directed Study is given (technical projects, creative writing, studio art, musical recital, audio or visual works, experimental research projects, business plans, etc.).
- The student will present and make available an abstract of his/her reading(s) and project(s) before a gathering of Honors Program students and faculty. The last Friday of each semester (Fall and Winter) will be set aside for this purpose.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for HON 234

HON235 - Honors Directed Study Abroad

Overview

Subject
Honors Program

Academic Department
Honors

School
Liberal Arts

Course Description
In this sophomore-level directed study, students are challenged to apply the knowledge and research skills acquired in their freshman year in the Honors Program. Students work individually with the faculty member leading the Directed Study Abroad class on a mutually-agreed-upon study topic. Students present summaries of their research before a meeting of Honors Program students and faculty held at the end of each semester or at another public forum. This course will be held abroad in a pre-selected country.NOTE: Additional special fees exist for travel and study abroad administration. Please see the Associate Dean/Program Administrator for specific information.

Course Pre-requisite(s)
ENG131 Introduction College Writing and ENG132 College Writing and Researchor ENG131H Honors Intro College Writing and ENG132H Honors Coll Writing & Research or any combination of these four courses; and HON151 HonorColloquiumCultureDetroit or HON161 Honors Colloquium with a C or better; and HON251 Great Works with a C or better

Course Co-requisite(s)
Honors Program Acceptance

Credit Hours
1

Total Contact Hours
Total Instructor Contact Hours:
16

Total Student Contact Hours:
16

Academic Level
Undergraduate

Goals, Topics, and Objectives

Course Goals
The Honors directed study aims to deepen students' interests in topics while strengthening their research and oral presentation skills as a way of preparing them for continued studies at transfer institutions. The Honors Directed Study Abroad class will further introduce students to foreign study and global cultures through the intensive study of and in a specific country.

Core Course Topics
Vary by academic field and discipline of the Honors Program (Honors Program faculty leading the Directed Study Abroad but will be focused on important subjects relevant to the host country of the Honors Program Directed Study Abroad).

Course objectives determined by the individual instructor and stipulated in a written "Student Contract." See Course Requirements below for detailed steps.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement

- Student produces agreed upon project(s), including a journal to be kept abroad, participation in discussions and field trips, and a final project to be finished not later than the midterm of the Fall Term following the study abroad.
- Student writes a 400 word (maximum) abstract summarizing the project for distribution to the Honors Day Student Presentation assembly held at the end of the semester or makes a formal presentation of his/her research before a public forum.

General Course Requirements and Recommendations

- The faculty leading the Directed Study Abroad will determine the assignments and projects the student will undertake in collaboration with the student.
- The instructor will draw up a "contract" (using the basic outlines of a course syllabus). The HP Directed Study Abroad contract will stipulate what is expected of both the instructor and the student in terms of readings, project goal, journal, and the specific due dates for completion of the readings and the project(s). It is highly recommended that due dates be determined for various stages of the project in addition to the final completion date, so that the student may receive critical feedback as well as avoid procrastination.
- The instructor presents a progress report and distributes the contract to a meeting of Honors faculty upon return from the Directed Study Abroad.
- Students enrolled in Honors Directed Study Abroad will read at least one influential work in the discipline of the instructor offering the Directed Study Abroad. An "influential work" is a work that has had a major impact on the discipline or on scholarship in general. At the discretion of the instructor, the student will read the work in whole or in part. The purpose of this requirement is to introduce students to the seminal figures in various disciplines as well as the nature, rigor, and breadth of scholarly works.
- Working under the supervision of the Honors Directed Study Abroad instructor, students also will work on a project(s) that will engage his/her analytical and research skills as well as result in a tangible outcome or product. The outcome may be a written paper, or any other tangible product suitable to the particular discipline of the student with the approval of the Directed Study Abroad instructor (technical projects, creative writing, studio art, musical recital, audio or visual works, experimental research projects, business plans, etc.) and will include a substantial focus on the thematic matter particular to the country in which the Honors Directed Study Abroad is held.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for HON 235

HON236 - Honors Directed Study - Service Learning

Overview

Subject
Honors Program

Academic Department
Honors

School
Liberal Arts

Course Description
Challenges sophomore students to apply knowledge and research skills acquired in their freshman year in the Honors Program. Students work individually with a faculty member of their choice on a mutually-agreed-upon study topic anchored in community service. Coursework includes presenting a research summary before a meeting of Honors Program students and faculty at the end of each semester.

Course Pre-requisite(s)
Permission from the Honors Program Director

Credit Hours
1

Total Contact Hours
Total Instructor Contact Hours:
16

Total Student Contact Hours:
16

Course Fee
10

Academic Level
Undergraduate

Goals, Topics, and Objectives

Course Goals
Aims to deepen students' interests in topics related to community service while strengthening their research and oral presentation skills as a way of preparing them for continued studies at transfer institutions. The course challenges students to engage in disciplined social service at an organization within metropolitan Detroit, to research historical, cultural, and political issues related to their work at the organization, and to interpret the significance of their service endeavors within the context of that research.

Core Course Topics
Varies by academic field and discipline of the Honors Program faculty willing to offer the Honors Program directed studies.

Course objectives determined by the individual instructor and stipulated in a written "Student Contract".

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement

- Student produces a journal that profiles and analyzes the community service activity undertaken.
- Student writes a 400 word (maximum) abstract summarizing the project for distribution to the Honors Day Student Presentation assembly held at the end of the semester.
- Student presents the project in summary form at the Honors Day Student Presentation assembly or, makes a formal presentation of the research before a public forum approved by the instructor and the Honors Program Director.

General Course Requirements and Recommendations

- The instructor will meet with the student in a face to face session one hour per week for fifteen weeks. Missed sessions will be made up.
- The instructor in collaboration with the student determines the assignments and focus of the project the student will undertake. Each instructor will draw up a "contract" following the model provided by the Honors Program. The HP Directed Study contract will stipulate what is expected of both the instructor and the student in terms of readings, project goal, and the specific due dates for completion of the readings and the project(s).
- In addition to assigned readings, the course work will require a minimum of fifteen hours of community service at a site or sites specified by the instructor in the contract. The instructor will select the assigned site(s) from a provided by the Honors Program Director. The student must perform at least one hour of service per week, verified by the appropriate contact at the site.
- It is highly recommended that due dates be determined for various stages of the project in addition to the final completion date, so that the student may receive critical feedback as well as avoid procrastination.
- The instructor will present a progress report and distribute the contract to a meeting of Honors faculty during the semester
- Students enrolled in Honors Directed Study—Service Learning will read at least one influential work in the discipline of the instructor that is relevant to the service that they are performing in the community. An "influential work" is a work that has had a major impact on the discipline or scholarship in general. At the discretion of the instructor, the student will read the work in whole or in part.
- In addition students enrolled in Honors Directed Study—Service Learning will maintain a journal that summarizes and analyzes their service experience each week and employs the required reading for the week to provide perspective to that experience. The student journal will constitute the primary outcome of the course.
- The student will present and make available an abstract of this journal before a gathering of Honors Program students and faculty. The last Friday of each semester (Fall and Winter) will be set aside for this purpose.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for HON 236

HON251 - Great Works

Overview

Subject
Honors Program

Academic Department
Honors

School
Liberal Arts

Course Description
Introduces seminal works from a range of disciplines, including literature, philosophy, history, religion, anthropology, psychology, and science. Explores each great work in terms of its capacity not only to assess issues crucial to its own era but also in terms of its power to illuminate the parameters of ethical, social, and cultural principles in the modern world.

Course Pre-requisite(s)
ENG131 Introduction College Writing Honors, with a C or better

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
25

Academic Level
Undergraduate

General Education Category
Humanities and Fine Arts

Michigan Transfer Agreement (MTA) Category
Category 5: Humanities and Fine Arts - Applied Degrees, Category 5: Humanities and Fine Arts - Transfer Degrees

Goals, Topics, and Objectives

Course Goals
The Honors Great Works Seminar aims to reveal to students their ability to engage challenging material from multiple disciplines and diverse cultures, and to encourage the continuation of such self-culture for a lifetime.

Core Course Topics

1. Critical textual analysis of great works from throughout time and from all over the world.
2. Relationship of style, genre, history, and culture on a given great work.
3. The interdisciplinary conversation of great ideas that occurs across cultures and time.
4. Oral & written evaluation and synthesis/presentation of ideas and arguments.

Interpret meaning in various texts by paying close attention to the creator's choices of detail, vocabulary, and style.

Discuss the relationship between different genres of texts and the multicultural & interdisciplinary environments from which they spring.

Articulate a critical evaluation and appreciation of a work's strengths and limitations.

Evaluate the commentary of classmates, as well as the remarks of the instructor, within a seminar setting.

Evaluate the contemporary relevance of particular texts.

Write critical essays employing a strong thesis statement, appropriate textual citations, contextual and intertextual evidence for their assertions

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement

1. 1,500 word (minimum) seminar essay
    - is a comparison and contrast of two of the required course readings selected by the instructor.
    - includes both a "summary" and an "analysis" section.
2. An oral final examination in which the instructor engages each student in conversation regarding course texts and themes.

General Course Requirements and Recommendations
This course is to be an interdisciplinary study of great works (defined broadly) over many cultures and times. While an instructor can choose specific themes and particular authors/creators to focus on, there should be an emphasis on using multiple disciplines and various media to explore with students the idea of what makes a work great.

Texts
Instructors should choose from the Honors Council approved list and coordinate their choices with the Honors Director.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for HON 251

HOSP101 - Wines of the World

Overview

Subject
Culinary Arts, Hospitality Mgm

Academic Department
Culinary Arts + Hospitality Management

School
Business, Entrepreneurshp, PD

Course Description
Examines the major grape varieties, the effect of soil and climate, classification system, and the unique methods of various wine makers. Also focuses on the major wine producing areas, giving complete guidelines for reading a wine label as well as purchasing, storing, and serving.

Credit Hours
1

Total Contact Hours
Total Instructor Contact Hours:
16

Total Student Contact Hours:
16

Course Fee
80

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Sensory Components of Wine: Sight, Taste, Smell and Touch
2. Primary Major Grape Varieties
3. Wine Aroma Wheel
4. Pairing Food and Wine
5. Legal Regulations of Grapes and Wine Processing

Identify various wines depending on the type of grapes by variety.

Evaluate the three steps in tasting a wine instead of drinking.

Identify various wines by the place they were produced (regions).

Explain the various wines pertaining to the producer and the year (vintage).

Describe pairing various wines with food items.

Demonstrate the proper procedures for serving different categories of wines.

Identify the sensory evaluation when drinking various wines.

Explain how the process of major grapes is processed to make wines.

Describe wine terminology.

Identify the differences in components, appearance, aroma and flavor of a variety of wines.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement

- Lab Participation: 50%
- Class Assignments: 25%
- Final Exam: 25%

Grading Scale
Grading Scale:

- 90% - 100% A
- 80% - 89% B
- 70% - 79% C
- 60% - 69% D
- 0% - 59% E

Texts
The Essentials of Wine with Food Pairing Techniques by John P. Lalognas, (current edition)

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for HOSP 101

HOSP103 - Major Wines Grape Varieties

Overview

Subject
Culinary Arts, Hospitality Mgm

Academic Department
Culinary Arts + Hospitality Management

School
Business, Entrepreneurshp, PD

Course Description
Examines varietal wines from many broad geographical areas, including vintage and specialty wines. Covers how to identify alcohol, acid, sugar, and tannin in wines. Also discusses the challenges of wine service in today's hospitality industry.

Credit Hours
1

Total Contact Hours
Total Instructor Contact Hours:
16

Total Student Contact Hours:
16

Course Fee
85

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. The Vineyard: Soil to Harvest
2. Primary Major Grape Varieties
3. Tasting Wine: Sensory Components
4. Wine Aroma Wheel
5. Wine Styles of Various Countries
6. Business of Selling and Serving Wines

Describe how grapes are grown for wine production.

Discuss the grapes, regulations and wine styles of the major wine production countries.

Discuss the regions and differences of wines by country.

Evaluate the various aromatic compounds of grapes according to acidity, tannin, fruitiness, sweetness and dryness.

Explain the major considerations when selecting wines.

Discuss the aging and storing conditions for bottles wines.

Evaluate different varieties of wine according to their price.

Identify different methods of selling wine in hospitality operations.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement

- Class Assignments: 25%
- Lab Participation: 50%
- Final Exam: 25%

Grading Scale
Grading Scale:

- 90% - 100% A
- 80% - 89% B
- 70% - 79% C
- 60% - 69% D
- 0% - 59% E

Texts
The Essentials of Wine with Food Pairing Techniques, John P. Laloganes (current edition)

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for HOSP 103

HOSP105 - Applied Food Service Sanitation

Overview

Subject
Culinary Arts, Hospitality Mgm

Academic Department
Culinary Arts + Hospitality Management

School
Business, Entrepreneurshp, PD

Course Description
Explores food contaminants, bacterial growth, safe food storage, and safe food handling procedures, as well as procedures for scheduling, cleaning, sanitizing, and pest control for facilities and equipment. NOTE: As part of this course, the National Restaurant Association Educational Foundation exam is included. Students who successfully pass the exam earn the ServSafe Food Protection Manager Certificate. This certificate is recognized by the state health department.

Course Pre-requisite(s)
Satisfactory completion of or enrollment in ENG081 or ENG-082 or higher, or a satisfactory score on the English placement exam.

Credit Hours
2

Total Contact Hours
Total Instructor Contact Hours:
32

Total Student Contact Hours:
32

Course Fee
25

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Foodborne Illnesses
2. The Microworld: Pathogens, Viruses, Parasites, Fungi, and Biological Toxins
3. Purchasing, Receiving, and Storage
4. The Flow of Food: Preparation, Cooking Food, Cooling and Reheating Food
5. The Flow of Food: Service: Holding Food and Serving Food
6. Facilities Sanitation
7. Food Safety Regulations, Standards, and Inspections
8. Physical Safety

Identify the dangers of foodborne illness.

Explain how to prevent foodborne illness.

Identify how food becomes unsafe.

Discuss key practices for ensuring safe food.

Identify and discuss The Micro World.

Calibrate a bi-metallic stem thermometer.

Discuss the three types of food contaminants/hazards.

Explain the prevention of cross-contamination.

Evaluate service techniques for food safety hazards.

Discuss monitoring of time and temperature.

Identify the steps in the flow of food through an establishment.

Discuss the elements of and procedure for supplier selection and approval.

List seven recommended receiving practices.

Discuss proper storage practices.

Discuss proper preparation and cooking practices.

Demonstrate proper cleaning and sanitizing practices.

Identify the various temperature zones of storage areas in an operation.

Enumerate and discuss the five steps of HACCP.

Discuss the benefits of employee training.

Identify the federal, state and local agencies involved in the food safety monitoring system.

Demonstrate proper handwashing.

Identify the equipment required for every handwashing station.

Locate MSDS sheets in the Culinary Arts department.

Discuss an IPM program.

Identify proper suppliers of food service chemicals.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Total Points: 400

- Assignments: 40
- Class Activities: 40
- ServSafe Certification Exam: 320

Grading Scale

- 90% - 100% A
- 80% - 89% B
- 70% - 79% C
- 60% - 69% D
- 0% - 59% E

Texts
ServSafe Course Book, current edition (with scantron certification exam form) and on-line learning component, National Restaurant Association Education Foundation.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for HOSP 105

HOSP107 - Artisanal Cheese and Craft Beer

Overview

Subject
Culinary Arts, Hospitality Mgm

Academic Department
Culinary Arts + Hospitality Management

School
Business, Entrepreneurshp, PD

Course Description
Covers introductory techniques used to bring cheese and craft beer together in a cohesive pairing. Examines the production, flavors, and origin of eight styles of cheese and four styles of beer.

Credit Hours
1

Total Contact Hours
Total Instructor Contact Hours:
16

Total Student Contact Hours:
16

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics
1. Brewing Process
2. Cheese Making Process
3. Other Fermented Food Examples
4. Fresh Cheese/Goat Cheese - Feta/Weiss Beer
5. Semi-Soft Cheese - Provolone, Edam, Gouda/Pale Ale-Brown Ale
6. Soft Ripened (Bloomy Rind) - Brie, Camembert/Ciders
7. Surface Ripened Cheese - Limburger/Bock
8. Semi-Firm/Semi-Hard Cheese - Monterey Jack, Cheddar, Gruyere/Pilsner
9. Hard Cheese (Grating Cheese)- Romano/Ciders
10. Blue Cheese- Gorgonzola/Stouts and Porters
11. Washed Rind Cheeses - Munster/Porters and Stouts

Describe the basic steps involved in the cheese making process.

Explain proper storage, service and handling of cheese.

List and describe the eight styles of cheese.

List and distinguish characteristics of common styles of beer.

Describe the basic steps involved in the brewing process.

Explain proper storage, service and handling of beer products.

Identify emerging trends in beer and food pairing.

Recognize and demonstrate understanding of the sensory aspects that guide us in pairing beer and cheese.

Complete training through Wisconsin Milk Marketing Board's (WMMB) Cheesecyclopedia® online self-study course.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
• Lab Participation:(5 x 10pts) 50 pts
• WMMB's Cheesecyclopedia Online Course: 100 pts
• Weekly Quizzes (5): 100 pts
• Final Exam: 100 pts
Total Possible Points: 350

Grading Scale
- A - 90% - 100%
- B - 80% - 89%
- C - 70% - 79%
- D - 60% - 69%
- E - 0% - 59%

Texts
Cheese and Beer, Janet Fletcher (Current Edition)

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for HOSP 107

HOSP145 - Ice Carving and Design

Overview

Subject
Culinary Arts, Hospitality Mgm

Academic Department
Culinary Arts + Hospitality Management

School
Business, Entrepreneurshp, PD

Course Description
Explores techniques used to shape, round, and sculpt ice displays with the use of hand and power tools. Also covers safety procedures related to ice handling; tools and equipment used in carving; qualities of the ice; and proper care and sharpening of tools. Final project involves carving an ice sculpture from a single block of ice.

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
62

Total Student Contact Hours:
62

Course Fee
90

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics
1. The Value of Professional Ice Carving
2. Composition of Ice
3. Art and Science in Carving
4. Tools of the Trade
5. Safety Techniques
6. Area Preparation and Application of Techniques
7. Single-block Carving
8. Finishing Techniques
9. Storage and Display
10. Advanced Skills
11. Multi-block Techniques
12. Competition and Guidelines
13. Single-block Buffet Designs
14. Computers and Templates

Identify ice-carving equipment and tools.

Demonstrate proper safety standards with 100% accuracy during ice carving session.

Demonstrate proper chisel control.

Utilize and draw a template of an existing ice design to produce an ice sculpture.

Demonstrate the ability to create a design using an overhead projector, templates and free-hand drawing on the ice block.

Safely operate and maintain an electric chain saw.

Analyze various ice carving techniques using the National Ice Carving Association judging criteria.

Demonstrate basic ice carving techniques of rounding, sanding, and straight-cutting on ice.

Apply detailed finishing techniques to ice sculptures.

Create an ice sculpture from a single 300-pound block of ice.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
- Weekly Workstation Set-Up/Breakdown: 100 points
- Notebook: 40 points
- Quizzes (2 x 30 pts each): 60 points
- Projects (6 x 100 pts each): 600 points
- Final Exam - Written: 100 points
- Practical - Ice Show Competition: 100 points
- Total Possible Points: 1000

General Course Requirements and Recommendations
Clothing required: Waterproof boots, apron or pants, gloves, ear plugs, jacket, and safety glasses
Grading Scale
- 90% - 100% = A
- 80% - 89% = B
- 70% - 79% = C
- 60% - 69% = D

- 0% - 59% = E

Texts
Ice Carving 101, by Michael Jasa and Brench Carlos (current edition)

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for HOSP 145

HOSP190 - Co-op in Hospitality

Overview

Subject
Culinary Arts, Hospitality Mgm

Academic Department
Culinary Arts + Hospitality Management

School
Business, Entrepreneurshp, PD

Course Description
Cooperative education is a structured method of combining classroom-based education with practical work experience. A cooperative education experience, commonly known as a "co-op," provides academic credit for structured employment experience. Work experience must be directly related to the student's declared major to be eligible. To register for this course, a student must have completed 50% of core coursework, maintain an overall GPA of 2.0 and a program specific GPA of 2.5

Course Pre-requisite(s)
HOSP340 A'la Carte and Buffet Cookery, Permission from Career Services Office

Credit Hours
1

Total Contact Hours
Total Instructor Contact Hours:
3

Total Student Contact Hours:
150

Course Fee
25

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
Student will submit a formal request in writing to the faculty and Associate Dean for work experience to be considered for Credit for Prior College-Level Learning.

The student will complete an interview, a reflective paper, or a presentation to the faculty in which the student develops and describes the learning objectives supported by the work experience, how those learning objectives were achieved and how that learning was put into practice.

Finally, the student must also provide a portfolio (or something comparable) that shows the work completed and provide some form of documentation confirming the work experience (a resume does not suffice) for which Credit for Prior College-Level Learning is requested.

Goals, Topics, and Objectives

Course Goals
Cooperative education helps students make the school-to-work transition, develop career and program-related learning objectives, and work on applicable skills for employment. Placements should provide students with the opportunity to apply and expand upon knowledge learned in the classroom, and develop the skills acquired in their coursework to align with the standards and expectations set by the worksite.

Core Course Topics
1. Professional Dress and Demeanor (attitude, posture, courteousness)
2. Workplace Communication
3. Interviewing Skills
4. Resume Building
5. Networking and Social Media
6. Seeking Employment
7. Career Advancement

1-3 program specific learning objectives will be developed by the instructor for each individual offering.
Students will create 1-3 learning objectives per credit to be approved by instructor for each individual offering.
Build a resume that meets standards of Career Services Office.
Explain the reasons for professional attire.
Wear professional attire while on the worksite.
Display appropriate professional attitude and demeanor while on the worksite.
Interview effectively.
Attend mock interview, give appropriate answers to five (5) questions.
Complete a written job application in a prompt, professional manner with all information legible, error-free, and thorough.
Use of Social Media sites (e.g., Facebook, LinkedIn, etc.) during Career Services workshop.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Term Paper Weekly Journal Creation of Learning Objectives Employer Evaluation Completion of 150 work hours

General Course Requirements and Recommendations
To be determined by the instructor. Detailed course syllabi will be standardized for all co-op courses and individual course requirements will be available to the School of Business, Entrepreneurship, and Professional Development and Curriculum Committee by request "For information only" for each term that the course is offered.

Texts
See Division for list of required texts

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for HOSP 190

HOSP211 - Introduction to the Hospitality Industry

Overview

Subject
Culinary Arts, Hospitality Mgm

Academic Department
Culinary Arts + Hospitality Management

School
Business, Entrepreneurshp, PD

Course Description
Surveys career opportunities in the hospitality industry. Presents hospitality as a single yet inter-related industry, emphasizing problem-solving tools rather than answers, and points out trends both past and present. Explores marketing, franchising, food service operations, hotel operations, and tourism.

Course Pre-requisite(s)
Satisfactory completion of ENG081 or ENG082 or higher, or a satisfactory score on the English placement exam.

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
25

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Characteristics of the Hospitality Industry
2. Long-term Prospects for Tourism
3. Sociocultural Impact of Tourism
4. Hotel Classifications
5. Hotel Department Functions
6. Key Cruise Industry Players
7. Classifications of Restaurants
8. Front of House Operations
9. Managed Service Segments
10. Hotels and Real Estate
11. Clubs
12. Theme Parks
13. History of the Gaming Industry
14. The Convention Industry
15. Event Planning

Define hospitality and the philosophy of the hospitality industry.
Trace the growth and development of the hospitality and tourism industry.
Identify the major kinds of food service, hotel and restaurant operations.
Identify a theme for a casual restaurant that is pervasive in the design of their menu, décor, and website.
Prepare an income statement for a food service operation.
Define service in terms of guest experience and the operation's performance.
Identify professional organizations within the field; explain purposes and benefits.
Outline the organization, structure and functional areas in various hospitality organizations as a perspective for later courses in menu planning, purchasing, food production and service, food and beverage controls, management, etc.
Evaluate career opportunities through participation in field trips and guest speakers in class.
Discuss and evaluate industry trends as they relate to career opportunities and the future of the industry.
Identify the major environmental concerns facing the hospitality and tourism industry.
Discuss and evaluate industry trade periodicals.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Total Possible Grade Points: 1300

- Class Participation - 20 points per session: 300 points
- Chapter Assignments - 20 points each: 300 points

- Internet Assignments (4): 100 points
- Personal Mission Statement: 50 points
- Travel Paper: 50 points
- Chapter Tests (100 pts x 4 tests): 400 points
- Final Examination (comprehensive): 100 points

Grading Scale

- 90% - 100% = A
- 80% - 89% = B
- 70% - 79% = C
- 60% - 69% = D
- 0% - 59% = E

Texts
Exploring the Hospitality Industry with on-line component, Walker & Walker (Current Edition)

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for HOSP 211

HOSP215 - International Cooking

Overview

Subject
Culinary Arts, Hospitality Mgm

Academic Department
Culinary Arts + Hospitality Management

School
Business, Entrepreneurshp, PD

Course Description
Presents a comprehensive overview of cuisines throughout the world. Explores how demographic changes and the accessibility of travel have altered America's cultural and culinary perspectives of the world at large.

Course Pre-requisite(s)
Satisfactory completion of ENG081 or ENG082 or higher, or a satisfactory score on the English placement exam.

Course Co-requisite(s)
Completed or concurrent enrollment in HOSP-105

Credit Hours
4

Total Contact Hours
Total Instructor Contact Hours:
62

Total Student Contact Hours:
62

Course Fee
80

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Cuisines Around the World
2. Culture and Religion's Influences on Food
3. Herbs Around the World
4. Cooking Techniques for International Cooking
5. Food Safety and Sanitation
6. Food Storage
7. Kitchen Tools and Proper Use
8. Business' Affect on the Food Industry
9. Buffets

Identify similarities and differences between the cuisines of the various countries.
Analyze various spices and herbs from different countries.
Prepare and serve an ethnic luncheon or dinner menu from recipes found on various websites.
Demonstrate proper cooking techniques for international dishes.
Examine the history of culinary influences of a specific country or region.
Analyze the country's or region's topography.
Explain the major ingredients and foods commonly used throughout the cuisine in many cultures.
Perform various culinary techniques while preparing a specific food course of the menu.
Analyze the proper handling of correct procedures for receiving, storing, preparing and serving hot and cold food items.
Demonstrate safe work habits to prevent injuries and avoid common hazards.
Examine the proper temperatures between hot and cold food items.
Analyze the proper procedure and use of various tools and equipment in a kitchen.
Demonstrate proper selection of equipment and utensils for specific application.
Demonstrate proper scaling and measurement techniques.
Apply basic math skills to recipe conversions.
Prepare crusty, soft and specialty yeast products.
Demonstrate proper knife skills.

Demonstrate proper safety and sanitation in the kitchen.

Name foods available around the world and why they are prevalent.

Explain origins of classical French cookery.

Discuss how trade and wars affected the use of ingredients.

Discuss how religion affects foods that are eaten/not eaten in certain cultures.

Demonstrate proper dining room buffet service techniques.

Demonstrate various buffet set-ups.

Perform various active stations during a buffet service.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Total Possible Grade Points: 710

- Safety Test (required to pass)
- 12 Chapter Assignments x 15 pts each: 180 points
- Class Assignments: 150 points
- Class Presentation - Daily Evaluation Books 20 pts per session x 14 sessions: 280 pts
- Final Exam: 100 points

Grading Scale

- 90% - 100% = A
- 80% - 89% = B
- 70% - 79% = C
- 60% - 69% = D
- 0% - 59% = E

Texts
International Cooking (A Culinary Journey), Patricia Heyman (current edition)

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for HOSP 215

HOSP220 - Introduction to Baking and Cooking

Overview

Subject
Culinary Arts, Hospitality Mgm

Academic Department
Culinary Arts + Hospitality Management

School
Business, Entrepreneurshp, PD

Course Description
Introduces basic concepts in food and baking preparation, and techniques used in the food service operation. Covers culinary terminology, proper use of tools and equipment, interpretation of recipes, and formulas and production methods. Emphasizes proper safety and sanitation protocols.

Course Pre-requisite(s)
Satisfactory completion of ENG081 or ENG082or higher, or a satisfactory score on the English placement exam.

Course Co-requisite(s)
Completed or concurrent enrollment in HOSP105 Applied Food Serv Sanitation, HOSP224 Culinary Skills & Nutritional, HOSP226 Fundamentals of Baking

Credit Hours

2

Total Contact Hours

Total Instructor Contact Hours:
32

Total Student Contact Hours:
32

Course Fee
25

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Standards of Professionalism
2. Sanitation and Safety
3. Food Handling and Personal Hygiene
4. Principles of Cooking and Food Science
5. Cooking Methods
6. Planning and Organizing Production
7. Concepts of Cooking Ingredients
8. Classifications of Foods

Define baking terms.

Identify equipment and utensils used in baking and discuss proper use and care.

Demonstrate proper selection of equipment and utensils for specific application.

Identify ingredients used in baking.

Demonstrate proper scaling and measurement techniques.

Apply basic math skills to recipe conversions.

Describe properties and list functions of various ingredients.

Define and describe quick-breads and the mixing methods utilized to produce them.

Define and describe pate choux, its uses, method of preparation, baking, and finishing.

Discuss nutritional concerns as they apply to baking.

Discuss recipe modifications to create more nutritionally beneficial baked goods and desserts.

Perform recipe yield conversions.

Perform the process of recipe costing.

Discuss service methods such as banquets, buffets and catering, and a la carte.

Demonstrate knife skills, hand tool and equipment operation, emphasizing proper safety techniques.

Identify the parts/components of a recipe.

Describe and use a standardized recipe.

Outline the procedure for writing a standardized recipe.

Identify and use utensils, pots and pans and demonstrate safe practices using stoves, mixers, ovens, etc.

Define and describe the sautéing process.

Define and describe the processes of pan-frying and deep-frying.

Define and describe the roasting and baking processes.

Define and describe the process of grilling and broiling.

Define and describe the processes of braising and stewing, noting the similarities and differences.

Define and describe the process of shallow-poaching.

Define poaching and simmering and correctly identify the temperature range at which each occurs.

Define and describe the boiling and steaming process.

Utilize standard weights and measures to demonstrate proper scaling and measurement techniques.

Identify and use herbs, spices, oils and vinegar, condiments, marinades, and rubs.

Evaluate the quality of herbs, spices, oils, vinegar, condiments, marinades, and rubs.

Define stock and describe its uses.

Identify different types of stocks.

List the basic ingredients needed for making stocks.

Describe the functions of the ingredients.

Describe the process of making stocks.

Define, describe and explain the purpose of sauces.

List the basic ingredients needed for making grand and non-grand sauces.

Describe the functions of the ingredients in sauces.

Define and describe soup and identify its two basic categories.

Describe the process of making each category of soup.

Identify a variety of fruits, vegetables, starches, legumes, and grains.

Describe the various cuisines and contributions of leading culinarians.

Identify professional organizations within the field; explain purposes and benefits.

Discuss/evaluate industry trends as they relate to career opportunities and the future of the industry.

Discuss and evaluate industry trade periodicals.

List basic menu planning principles.

Identify principles of menu layout and design.

Create menu item descriptions following established truth-in-menu guidelines.

Apply principles of nutrition to menu development.

Develop a menu layout for a foodservice operation.

Discuss the availability of food and seasonal menus.

Discuss menu planning resources (internet, professional, and vendors).

Discuss contemporary nutritional issues (i.e. vegetarianism, heart healthy menus, and religious dietary laws).

Discuss how HACCP practices are addressed in the purchasing, receiving, storing, and issuing procedures.

Explain regulations for inspecting and grading of meats, poultry, seafood, eggs, dairy products, fruits, and vegetables.

Outline yield and quality grades and National Association of Meat Purveyors (NAMP) specifications for meats.

Explain proper receiving and storing of cleaning supplies and chemicals.

Explain the procedures for rotation of stock and for costing and evaluating, including FIFO and LIFO.

Describe proper procedures of issuing product according to requisition.

Identify microorganisms which are related to food spoilage and foodborne illnesses; describe their requirements and methods for growth.

List and describe symptoms common to foodborne illnesses and list various ways these illnesses can be prevented.

List the major causes of food spoilage.

Define food spoilage indicators.

Outline the flow of food through an establishment and list the various ways contamination may be prevented along the pathway.

Outline the requirements for proper receiving and storage of both raw and prepared foods.

Recognize sanitary and safety design and construction features of food production equipment and facilities. (i.e. NSF, UL, OSHA, ADA, etc)

Describe types of cleaners and sanitizers and their proper use.

Identify the seven HACCP Principles and the critical control points during all food handling processes as a method for minimizing the risk of foodborne illness.

Review Material Safety Data Sheets (MSDS) and explain their requirements in handling hazardous materials. Discuss right-to-know laws.

Describe appropriate measures for insects, rodents and pest control eradication.

List common causes of typical accidents and injuries in the foodservice industry and outline a safety management program.

Demonstrate appropriate emergency policies for kitchen and dining room injuries.

Describe appropriate types of use of fire extinguishers used in the foodservice area.

Review laws and rules of the regulatory agencies governing sanitation and safety in foodservice operation.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Total Possible Grade Points: 930

- Class test (3 x 100 pts. ea.): 300 points
- Workbook Assignments (19 x 20 pts. ea.): 380 points
- Wiley Plus on-line computer program (10 assignments x 15 pts. ea.): 150 points
- Final exam: 100 points

General Course Requirements and Recommendations
The following are required by the 2nd full week of class:

- Chef Jacket
- Chef Hat
- Chef Apron

Grading Scale

- 90% - 100% = A
- 80% - 89% = B
- 70% - 79% = C
- 60% - 69% = D
- 0% - 59% = E

Texts
Professional Cooking W/Study Guide & Visual Food Gd & Wiley plus on-line component, Gisslen (Current Edition)

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for HOSP 220

HOSP221 - Front Office Procedures & Guest Service

Overview

Subject
Culinary Arts, Hospitality Mgm

Academic Department
Culinary Arts + Hospitality Management

School
Business, Entrepreneurshp, PD

Course Description
Presents a systematic approach to the front office procedures by detailing the flow of business in the lodging operation. Examines the various jobs in the hotel/motel front office, and emphasizes guest relations and services, night audit, and check-out procedures.

Course Pre-requisite(s)
HOSP211 Intro to Hospitality Industry

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
50

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. The Front Office
2. Equipment
3. Reservation Process
4. Hotel Information System
5. Registration Process
6. Room Status Process
7. The Guest Accounting System
8. Night Audit
9. Check-out/Settlement

Identify various types of hotels in terms of service they provide for the guest.
Analyze (in classroom groups) various case studies of the lodging operation while stressing the "team" aspect for decision making.
Create an organizational chart for a mid-sized hotel.
List job specifications and tailor job descriptions for specific front office positions.
Explain the function and operation of basic front office equipment.
Identify the terms used in guest reservations.
Identify the process of guest registration.
Demonstrate the procedures for managing front office operations utilizing a computer.
Identify functions and procedures related to guest check-out.
Identify functions and procedures pertaining to settlement process for a guest at a hotel.
Describe the functions of the night audit and various financial reports prepared by the front desk.
Demonstrate the "Virtual Hotel Software - Performance for Front Desk Employees" on the computer.
Develop procedures for handling complaints.
Describe the elements of a security program in a lodging operation.
Compare the target markets of the various categories of lodging operations.
Discuss guest communications within the lodging industry.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement

- Chapter Assignments

- Virtual Hotel/Front Office Simulations
- Group Case Studies
- Progress Tests
- Final Exam

General Course Requirements and Recommendations
Basic keyboarding skills; calculator

Grading Scale
- 90% - 100% = A
- 80% - 89% = B
- 70% - 79% = C
- 60% - 69% = D
- 0% - 59% = E

Texts
Managing Front Office Operations, by Michael Kasavana and Richard Brooks (Current Edition)

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for HOSP 221

HOSP224 - Culinary Skills and Nutritional Cooking

Overview

Subject
Culinary Arts, Hospitality Mgm

Academic Department
Culinary Arts + Hospitality Management

School
Business, Entrepreneurshp, PD

Course Description
Introduces basic concepts in food preparation and techniques in food service operation. Explores proper use of kitchen procedures with hands-on food production methods, and discusses how to utilize the principles, standards, and practices involved in professional quantity food production. Instructor rotates students in the following production areas: pantry, soups, stocks, sauces, vegetables, and the entree department.

Course Pre-requisite(s)
Satisfactory completion of or enrollment in ENG-081 or ENG-082 or higher, or a satisfactory score on the English placement exam.

Course Co-requisite(s)
Completed or concurrent enrollment in HOSP105 Applied Food Serv Sanitation, HOSP220 Intro to Baking & Cooking, and HOSP226 Fundamentals of Baking

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
69.5

Total Student Contact Hours:
69.5

Course Fee
55

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics
1. Standards of Professionalism
2. Safety and Sanitation
3. Knife Skills
4. The Senses and Food
5. Selecting and Using Proper Tools and Equipment
6. Working More Efficiently
7. Cooking Principles
8. Classifications of Stocks
9. Classifications of Soups
10. Leading and Secondary Sauces
11. Plate Presentation
12. Meat Cookery
13. Poultry Cookery
14. Fish and Shellfish Cookery
15. Vegetable and Starch Cookery
16. Conversions and Measurements
17. Food Service Terminology

Perform calculations using current technology (i.e. computers, calculators, POS).
Demonstrate knife skills, hand tool and equipment operation, emphasizing proper safety techniques.
Identify the parts/components of a recipe.
Describe and use a standardized recipe.
Outline the procedure for writing a standardized recipe.
Identify and use utensils, pots and pans, and demonstrate safe practices using stoves, mixers, ovens, etc.
Define and describe the sautéing process.
Prepare a variety of foods using the sauté techniques.
Evaluate the quality of sautéed items.
Define and describe the processes of pan-frying and deep-frying.
Fry a variety of foods to their proper doneness.
Evaluate the quality of fried foods.
Define and describe the roasting and baking processes.
Compare and contrast roasting to baking, poeleing, smoke-roasting, and spit-roasting.

Roast meats, poultry, and fish to the correct doneness to develop the best flavor and texture in the finished dish.

Evaluate the quality of roasted items.

Define and describe the process of grilling and broiling.

Grill and broil foods to the proper doneness.

Evaluate the quality of grilled and broiled items.

Define and describe the processes of braising and stewing, noting the similarities and differences.

Braise and stew foods to the proper doneness.

Evaluate the quality of braised and stewed items.

Define and describe the process of shallow-poaching.

Prepare shallow-poached foods properly and produce a sauce that incorporates the cooking liquid.

Evaluate the quality of shallow-poached items.

Define poaching and simmering and correctly identify the temperature range at which each occurs.

Poach and simmer foods to the proper doneness.

Evaluate the quality of poached and simmered foods.

Define and describe the boiling and steaming process.

Prepare boiled and steamed foods to the proper doneness.

Evaluate the quality of boiled and steamed items.

Utilize standard weights and measures to demonstrate proper scaling and measurement techniques.

Identify and use herbs, spices, oils and vinegars, condiments, marinades, and rubs.

Perform basic fabrication tasks with meat, poultry, seafood, and variety meats.

Using the basic cooking methods, prepare meat, seafood, poultry, and variety meats to the proper doneness.

Evaluate the quality of prepared meats, seafood, poultry and variety meats.

Define stock and describe its uses.

Identify different types of stocks.

List the basic ingredients needed for making stocks.

Describe the functions of the ingredients.

Describe the process of making stocks.

Prepare a variety of stocks.

Evaluate the quality of a properly made stock.

Define, describe and explain the purpose of sauces.

Identify and prepare the grand sauces.

Prepare a variety of non-grand/classical sauces.

List the basic ingredients needed for making grand and non-grand sauces.

Describe the functions of the ingredients in sauces.

Evaluate the quality of a properly made sauce.

Define and describe soup and identify it's two basic categories.

Prepare a variety of soups from each category.

Describe the process of making each category of soup.

Evaluate the quality of a properly made soup.

Identify a variety of fruits, vegetables, starches, legumes and grains.

Prepare a variety of fruits, vegetables, starches, legumes and grains using the basic cooking methods.

Evaluate the quality of prepared fruits, vegetables, starches, legumes and grains.

Identify and prepare a variety of breakfast batter products.

Evaluate the quality of prepared breakfast batter products.

Identify tools and equipment used in garde manger and menu planning, emphasizing safety and sanitation procedures.

Use cheese as an ingredient in recipes.

Discuss and demonstrate cooking techniques and storage principles and portion sizes for maximum retention of nutrients and effective weight management.

Demonstrate acceptable procedures when preparing potentially hazardous foods to include time/temperature principles.

Review Material Safety Data Sheets (MSDS) and explain their requirements in handling hazardous materials. Discuss right-to-know laws.

Develop cleaning and sanitizing schedule and procedures for equipment and facilities.

Demonstrate appropriate emergency policies for kitchen and dining room injuries.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Total Possible Grade Points: 480

- Class Presentation - daily lab evaluation (15 sessions x 20 points): 300 points
- Mid Term: 20 points
- Culinary Arts Notebook/Folder: 20 points
- Hospitality Banquets/Events: 40 points
- Final Practical Exam: 60 points
- Final Written Exam: 40 points

Grading Scale

- 90% - 100% = A
- 80% - 89% = B
- 70% - 79% = C
- 60% - 69% = D
- 0% - 59% = E

Texts

- Professional Cooking by Wayne Gisslen, (Current Edition), includes Wiley Plus computer program
- The Visual Food Lover's Guide

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for HOSP 224

HOSP226 - Fundamentals of Baking

Overview

Subject
Culinary Arts, Hospitality Mgm

Academic Department
Culinary Arts + Hospitality Management

School
Business, Entrepreneurshp, PD

Course Description
Covers the basic concepts, standards, and practices involved in professional quantity baking production. Examines the preparation and techniques used in bakery operations. Instructor rotates students through various production areas, which include but are not limited to: quick breads, cookies, yeast products, layered dough, pies, basic cakes, cheesecakes, simple pastries, and doughnuts. NOTE: Chef jacket, chef hat, and chef apron are required by the second full week of classes.

Course Pre-requisite(s)
Satisfactory completion of or enrollment in ENG-081 or ENG-082 or higher, or a satisfactory score on the English placement exam.

Course Co-requisite(s)
Completed or concurrent enrollment in HOSP105 Applied Food Serv Sanitation, HOSP220 Intro to Baking & Cooking, and HOSP224 Culinary Skills & Nutritional

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
69.5

Total Student Contact Hours:
69.5

Course Fee
45

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. The Kitchen Brigade System
2. Safety and Sanitation
3. Equipment Identification
4. Measurements and Following a Standardized Recipe
5. Quickbreads
6. Yeast Dough Products
7. Cookies and Bars
8. Pie Dough and Fillings
9. Cheesecakes
10. Laminated Yeast Dough Products
11. Doughnuts and Sweet Dough Products
12. Basic Cakes and Fillings
13. Custards, Puddings and Soft Fillings
14. Paté Choux Products

Define baking terms.
Identify equipment and utensils used in baking and discuss proper use and care.
Demonstrate proper selection of equipment and utensils for specific application.
Identify ingredients used in baking.
Demonstrate proper scaling and measurement techniques.
Apply basic math skills to recipe conversions.
Describe properties and list functions of various ingredients.
Define and describe the steps in the production of yeast-leavened breads.
Prepare a variety of yeast-leavened breads.
Evaluate the quality of yeast-leavened breads.
Define and describe quick-breads and the mixing methods utilized to produce them.
Prepare and evaluate the quality of a variety of quick-breads.
Define and describe the various types of pies and tarts and the mixing methods utilized to produce them.
Prepare a variety of pies and tarts.
Evaluate the quality of prepared pies and tarts.

Define and describe the variety of cookie types and the mixing methods utilized to produce them.

Produce a variety of types of cookies.

Evaluate the quality of prepared cookies.

Define and describe the variety of cake types and the mixing methods utilized to produce them.

Prepare a variety of cakes.

Evaluate the quality of prepared cakes.

Demonstrate basic icing and decorating techniques.

Evaluate the quality of iced and decorated cakes.

Define and describe the variety of laminated doughs.

Explain the process of lamination as it applies to doughs.

Prepare a variety of laminated dough products.

Evaluate the quality of prepared laminated dough products.

Define and describe pate choux, it's uses, method of preparation, baking and finishing.

Prepare a variety of pate choux products.

Evaluate the quality of prepared pate choux products.

Define and describe creams, custards, puddings and related sauces.

Describe the various types of uses of and preparation methods of various creams, custards, puddings and related sauces.

Prepare a variety of creams, custards, puddings and related sauces.

Evaluate the quality of prepared creams, custards, puddings and related sauces.

Define and describe the various types, uses, and methods of preparation of dessert sauces.

Prepare a variety of dessert sauces.

Evaluate the quality of prepared dessert sauces.

Discuss the application of mixes and other value-added products.

Define and describe a variety of fillings and toppings for pastries and baked goods.

Discuss methods of preparation and finishing techniques for various fillings and toppings.

Prepare a variety of fillings and toppings for pastries and baked goods.

Demonstrate the presentations of baked goods and desserts.

Evaluate the quality of presentations of baked goods and desserts.

Discuss recipe modifications to create more nutritionally beneficial baked goods and desserts.

Perform calculations using current technology (i.e. computers, calculators, POS).

Demonstrate knife skills, hand tool and equipment operation, emphasizing proper safety techniques.

Identify the parts/components of a recipe.

Describe and use a standardized recipe.

Identify and use utensils, pots and pans and demonstrate safe practices using stoves, mixers, ovens, etc.

Utilize standard weights and measures to demonstrate proper scaling and measurement techniques.

Demonstrate acceptable procedures when preparing potentially hazardous foods to include time/temperature principles.

Review Material Safety Data Sheets (MSDS) and explain their requirements in handling hazardous materials. Discuss right-to-know laws.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Total Possible Grade Points: 480

- Class presentation - daily lab evaluation (15 sessions x 20 points): 300 points
- Mid Term: 20 points
- Culinary Arts Notebook/Folder: 20 points
- Hospitality Banquets/Events: 40 points
- Final Lab Practical Exam: 60 points
- Final Written Exam: 40 points

General Course Requirements and Recommendations
The following are required by the 2nd full week of classes:

- Chef Jacket
- Chef Hat
- Chef Apron

Grading Scale

- 90% - 100% = A
- 80% - 89% = B
- 70% - 79% = C
- 60% - 69% = D
- 0% - 59% = E

Texts

- Professional Cooking & Baking, Wiley Plus on-line component, Wayne Gisslen, (Current Edition)

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for HOSP 226

HOSP235 - Ice Carving for the Professional

Overview

Subject
Culinary Arts, Hospitality Mgm

Academic Department
Culinary Arts + Hospitality Management

School
Business, Entrepreneurshp, PD

Course Description
Demonstrates how to carve ice sculptures in single and multi-block designs, custom-colored logo designs, and functional ice carvings used on culinary food buffets. Offers advanced techniques in the use of hand and power tools.

Course Pre-requisite(s)
HOSP145 Ice Carving and Design

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
62

Total Student Contact Hours:
62

Course Fee
90

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. The Value of Professional Ice Carving
2. The Science of Ice
3. The Sculptor's Tools and Equipment
4. Safe Practices and Procedures
5. Adding Colors to the Use of Ice Templates
6. Preparation of the Ice Carving Area, and Application of Techniques and Fusing
7. Managing the Ice Studio, and Transportation of Ice
8. Displaying and Lighting of Ice
9. Custom Design Techniques, and Special Event Sculpturing
10. Ice Sculpting Organizations, Competitions, and Festivals
11. The Business Side of Ice Sculpting
12. Applying Guidelines to Single-block Freestyle Designs
13. Time Management of Team Ice Sculptures
14. Practical Multi-block Techniques on Location

Apply ice carving techniques using power tools.
Demonstrate proper safety standards with 100% accuracy during ice carving session
Demonstrate proper chisel control
Utilize and draw a custom ice design using colors.
Demonstrate the ability to transfer designs using an overhead projector, templates, and free-hand drawings on the ice block.
Sculpt a functional ice liquor luge.
Analyze various ice carving techniques using the National Ice Carving Association Standards for judging, and applying them to the carved ice sculpture.
Demonstrate ice carving techniques using a freestyle ice design.
Apply detailed finishing techniques to ice sculptures.
Sculpt an ice sculpture using a multi-block ice design.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement

- Weekly Workstation Set-Up/Breakdown: 100 points
- Notebook: 40 points
- Quizzes (2 x 30 pts each): 60 points
- Projects (7 x 100 pts each): 700 points
- Written Final Exam: 100 points
- Practical Test (Ice Show Competition): 100 points
- Total Possible Points: 1000

General Course Requirements and Recommendations
Clothing required: waterproof boots, apron or pants, gloves, ear plugs, jacket, and safety glasses.

Grading Scale

- 90% - 100% = A
- 80% - 89% = B
- 70% - 79% = C
- 60% - 69% = D
- 0% - 59% = E

Texts
Ice Sculpturing the Modern Way, by Robert Garlough, Randy Finch, and Derek Maxfield (current edition)

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for HOSP 235

HOSP245 - Hotel and Restaurant Desserts

Overview

Subject
Culinary Arts, Hospitality Mgm

Academic Department
Culinary Arts + Hospitality Management

School
Business, Entrepreneurshp, PD

Course Description
Examines the specific principles of the baking process. Covers volume banquet desserts, chocolate decorating, sugar casting, and the intricacy of cake decoration. Also focuses on assembling and presenting desserts, including tortes, petit fours, French pastries, candies, frozen desserts, and decorative centerpieces. Emphasizes understanding formulas, proper weights, and measures.

Course Pre-requisite(s)
HOSP105 Applied Food Serv Sanitation and HOSP226 Fundamentals of Baking

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
75

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Kitchen Equipment; Safety and Sanitation
2. Petits-Fours
3. Individual Plated Desserts
4. Marzipan
5. Soufflés
6. Frozen Desserts
7. Candies
8. Confectionary Centerpieces
9. Modern Pastry Techniques
10. Tarts and Pies
11. Sugar Work

Identify and use common and specialty ingredients used in baking.

Convert recipes to a new yield.

Cook sugar and isomalt for basic sugar display work.

Define and describe hot and cold soufflés.

Define and describe marzipan.

Define and describe various types of candies.

Discuss methods of preparation on/for cooking sugar and isomalt that is to be used for candies or sugar display pieces.

Discuss the method of preparation for marzipan.

Discuss the method of preparation for pastillage and royal icing.

Evaluate the quality of chocolate, chocolate confections and chocolate display pieces.

Evaluate the quality of cooked sugar and isomalt and prepared sugar display pieces.

Evaluate the quality of pastillage, royal icing and prepared displayed pieces.

Evaluate the quality of prepared marzipan items.

Evaluate the quality of various prepared candies.

Prepare bread dough and produce various decorative bread items.

Prepare display pieces using pastillage and royal icing.

Prepare sugar and/or isomalt display pieces.

Prepare various types of candies.

Produce various petit fours, including various finishing and display techniques.

Produce a variety of ice cream and sorbets.

Produce various hot and cold soufflés.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement

- Class Evaluations (15 sessions x 20 pts each): 300 points
- Homework and Notebook: 60 points
- Special Project: 100 points
- Final Exam: 100 points
- Total Points Possible: 560

General Course Requirements and Recommendations
Chef jacket, chef hat, chef apron Decorating Tips: #18, #22, #352, # 104, # 3, #80 Rose Nail - #7 Spatula 6.2 inch 2- 12 Inch Nylon Pastry Bags Pointed Scissors

Grading Scale

- 90% - 100% = A
- 80% - 89% = B
- 70% - 79% = C
- 60% - 69% = D
- 0% - 59% = E

Texts
The Advance Art of Baking and Pastry by R. Andrew Chlebana (current edition)

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for HOSP 245

HOSP250 - Hospitality and Travel Marketing

Overview

Subject
Culinary Arts, Hospitality Mgm

Academic Department
Culinary Arts + Hospitality Management

School
Business, Entrepreneurshp, PD

Course Description
Explores the need and value of a cooperative marketing effort among hotels, airlines, restaurants, travel agents, and other important industry groups. Discusses research and analysis, the development and implementation of marketing plans and strategies, advertising, promotions, public relations, and pricing structures.

Course Pre-requisite(s)
HOSP211 Intro to Hospitality Industry

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
25

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Introduction: Marketing for Hospitality and Tourism
2. Service Characteristics of Hospitality and Tourism Marketing
3. The Role of Marketing in Strategic Planning
4. The Marketing Environment
5. Managing Customer Information to Gain Customers Insights
6. Consumer Markets and Consumer Buying Behavior
7. Organizational Buyer Behavior of Group Market
8. Customer Driven Marketing Strategy: Creating Value for Target Customers
9. Designing and Managing Products and Brands: Building Customer Value
10. Internal Marketing
11. Pricing: Understanding and Capturing Customer Value
12. Marketing Channels: Delivering Customer Value
13. Engaging Customers and Communicating Customer Value
14. Public Relations and Sales Promotion
15. Professional Sales
16. Direct, Online, Social Media and Mobile
17. Destination Marketing

Define marketing and the marketing process.

Identify the difference between hospitality marketing mix and the traditional marketing mix.

List the steps of the marketing planning process.

Define the five essential marketing intelligence tools.

Describe the difference between the nature of products and the nature of services.

List and discuss the various channels of distribution in hospitality marketing.

Assess the customer's perception of risk.

Compare quality control and quality assurance.

Evaluate supply and demand of the hospitality product.

Explain different types of operations, limited service, full service, etc.

Review service levels and guest's perceptions.

Judge the impact of geographic segmentation.

Discuss demographic segmentation.

Explain the line level employee's impact on the marketing effort.

Define the product life cycle and the role it plays in marketing strategy.

List and identify marketing concepts used to develop and introduce a new product.

List the advertising process to develop an advertising campaign.

List solutions to a marketing problem that many restaurants face having to appeal to families.

Develop a basic press kit for a property.

Identify the external and internal factors that influence consumer decision-making.

Evaluate interdepartmental relationships.

Define marketing positioning.

Discuss different pricing strategies: selling up, selling down, price ranges, etc.

List the ten keys to a positive customer reaction to a hospitality product.

Identify how organizational buyers differ from individual buyers.

Discuss the different laws and acts that affect marketing.

Define the product life cycle and the role it plays in marketing strategy.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
• In Class Participation (15 x 10) 150 points • Reading Quizzes (15 x 10) 150 points • Project Assignments: (8 x 25) 200 points • Final Presentation 50 points • Final Marketing Plan 50 points Total Possible Grade Points: 600

Grading Scale

- 90% - 100% = A
- 80% - 89% = B
- 70% - 79% = C
- 60% - 69% = D
- 0% - 59% = E

Texts
Marketing for Hospitality and Tourism, Kotler/Bowen/Makens/Baloglu (current edition)

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for HOSP 250

HOSP251 - Dining Room Service and Operations

Overview

Subject
Culinary Arts, Hospitality Mgm

Academic Department
Culinary Arts + Hospitality Management

School
Business, Entrepreneurshp, PD

Course Description
Applies basic principles of table service in the production dining room. Emphasizes effective serving procedures and techniques, including cordial and prompt attention to customers, proper dress and grooming practices, and in-depth knowledge of menu items.

Course Pre-requisite(s)
HOSP340 A'la Carte and Buffet Cookery

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
62

Total Student Contact Hours:
62

Course Fee
70

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Table Setting, Service Styles
2. Equipment Handling and Identification
3. Front of the House General Practices
4. Hospitality: Diet Restrictions, Faith & Medical
5. Proper Service Etiquette and Ethics
6. Wine Opening & Service
7. Beer & Cocktails essentials
8. Restaurant Menu Knowledge
9. Point of Sales System
10. Servsafe Alcohol
11. Guest Service Gold

Demonstrate how to set up a dining room table and place setting prior to serving guests.

Develop and refine the eight behaviors common to professional servers.

Experience and demonstrate guest check procedures with 100% accuracy.

List the menu ingredients and describe the menu ingredients on the 5101 restaurant menu.

Describe the proper accounting procedures to balance a cash register.

Identify and describe the servers report and clock-in and clock-out procedures.

Describe American, English, French, and Russian service.

Explain inter-relationships and work flow between dining room and kitchen operations.

Describe the types of service jobs in the industry and the skills needed to successfully perform the tasks for each job.

Recognize and use safe and sanitary serving procedures.

Identify the parts of a cover and set up a variety of covers.

Describe the duties of a server and demonstrate the ability to perform them.

Create a summary of side-work duties and demonstrate the ability to perform them.

Describe the ways to handle customers with complaints and special needs and demonstrate ways to handle them.

Use suggestive selling techniques.

Prepare and serve a variety of tableside dishes.

Compare and contrast major "types of service".

Identify and discuss the presentation and service of alcoholic, non-alcoholic and de-alcoholized beverages including coffee and tea.

Identify equipment and glassware used for beverage preparation and service.

Discuss opening and closing procedures of a beverage operation.

Become ServSafe certified in responsible alcohol service.

Receive Guest Service Gold certification

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement

- Lab Participation - 11 weeks x 30 pts: 330 points
- FDRP Assignments 8 x 15pts: 120
- Class quizzes 9 x 10 pts: 90 points
- Dining Room Associate Test: 50 points
- Restaurant Paper: 50 points
- Events (8 hours): 60 points
- ServSafe Alcohol Exam: 50 points
- Guest Service Gold Exam : 50 pts
- Total Possible Grade Points: 800

Grading Scale

- 90% - 100% = A
- 80% - 89% = B
- 70% - 79% = C
- 60% - 69% = D
- 0% - 59% = E

Texts
ServSafe Alcohol, current edition (with certification exam answer sheet)
Federation of Dining Room Professionals online training and certification (Included) Guest Service Gold® Golden Opportunities Online Program and Certification

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for HOSP 251

HOSP255 - Professional Cake Decorating

Overview

Subject
Culinary Arts, Hospitality Mgm

Academic Department
Culinary Arts + Hospitality Management

School
Business, Entrepreneurshp, PD

Course Description
Provides practical information for the individual serious about creating and producing high quality, decorated cakes from start to finish. Discusses many types of decorated cakes as well as the application of different kinds of icings, including buttercream icing and rolled fondant. Covers proper preparation of borders, variation of flowers, other decorations, the art of cake writing, wedding cakes, gumpaste flowers, and fondant work.

Course Pre-requisite(s)
HOSP105 Applied Food Serv Sanitation and HOSP226 Fundamentals of Baking

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
62

Total Student Contact Hours:
62

Course Fee
75

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Equipment List and Uses
2. Batter Types
3. Serving Sizes and Portions per Cake
4. Types of Frosting
5. Frosting Techniques
6. Royal Icing and Gum Sugar
7. Colors and Coloring Techniques
8. Piping Animals and Figures
9. Buttercream Transfer Method
10. Airbrush Techniques
11. Cupcake Sculptures
12. Layer Cakes: Tiers, Structures, Supports and Desgin
13. Fondant
14. Gumpaste
15. Wedding Cakes

Demonstrate basic cake decorating and methods for standard cones.
Identify equipment needed for cake decorating.
Prepare various types of cakes and icings.
Examine various cake borders and methods of preparation.
Distinguish between various color palette for icing and flowers.
Demonstrate various techniques of preparing flowers and other decorative items.
Analyze various types of icing for the art of cake design.
Identify various methods for assembling cakes.
Create advanced projects: basketweave cakes, air-brushing cakes, sculpture-style cakes.
Design and prepare a two-tier layer cake, structurally supported, properly frosted, and adorned with advanced decorations.
Develop advanced decorating and finishing techniques for cakes.
Evaluate the quality of decorated cakes.
Define and describe pastillage and royal icing.
Discuss the methods of preparation for pastillage and royal icing.
Prepare pastillage and royal icing.
Evaluate the quality of pastillage, royal icing and prepared display pieces.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement

- Daily Evaluation (15 sessions x 20 pts each): 300 points
- Notebook: 40 points
- Quizzes, (2 x 20 pts each): 40 points
- Project #1 - Basket of Flowers: 30 points
- Project #2 - Buttercream Transfer: 30 points
- Project #3 - Fondant Cake: 40 points
- Final Design Draft: 10 points
- Written Final Exam: 50 points
- Practical: 60 points
- Total Possible Grade Points: 600

Grading Scale

- 90% - 100% = A
- 80% - 89% = B
- 70% - 79% = C
- 60% - 69% = D
- 0% - 59% = E

Texts
Professional Cake Decorating, Toba Garrett (current edition)

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for HOSP 255

HOSP270 - Facilities Management

Overview

Subject
Culinary Arts, Hospitality Mgm

Academic Department
Culinary Arts + Hospitality Management

School
Business, Entrepreneurshp, PD

Course Description
Studies the critical roles of housekeeping, maintenance, and design and development in hotel, restaurant, and non-commercial facilities. Explores the impact of these roles on operating budgets, guest perception, and guest service.

Course Pre-requisite(s)
HOSP211 Intro to Hospitality Industry

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. The role of housekeeping in hospitality operations.
2. Hospitality facilities management tools, techniques, and trends.
3. Food service planning and design.
4. Lodging, planning, and design.
5. Renovation and capital projects.

Explain the relationship between the housekeeping, front office, maintenance, and food and beverage departments.
Identify typical cleaning responsibilities of the housekeeping department.
Identify basic management functions of the Executive Housekeeper.
Describe the procedures typically followed by room attendants for pre-shift set-up and guest room cleaning.
Distinguish routine cleaning from deep cleaning functions.
State the goals of maintenance management systems for several types of maintenance.
List the elements to consider when contracting for services.
Describe the role of the maintenance department in capital projects and renovations including the role of facilities benchmarking.
Categorize food service equipment consultants and contractors.
Discuss building materials and associated construction methods as they relate to the components of a property.
Explain the concept development process for food service facilities.
Identify regulations that affect the construction of food service facilities.
Describe the hotel development process.
Summarize the life cycle of various facilities and hotel areas.
Explain how a renovation plan is implemented including the design phase and construction phase.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
• Progress Tests (4 x 50 pts each): 200 points
• Chapter Assignments: 60 points
• Class Attendance/Participation: 40 points
• Term Project/Paper: 50 points
• Final Exam: 100 points
Total Possible Grade Points: 450

Grading Scale

- 90% - 100% = A
- 80% - 89% = B
- 70% - 79% = C
- 60% - 69% = D
- 0% - 59% = E

Texts
See Department for approved text(s).

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for HOSP 270

HOSP290 - Co-op in Hospitality

Overview

Subject
Culinary Arts, Hospitality Mgm

Academic Department
Culinary Arts + Hospitality Management

School
Business, Entrepreneurshp, PD

Course Description
Cooperative education is a structured method of combining classroom-based education with practical work experience. A cooperative education experience, commonly known as a "co-op," provides academic credit for structured employment experience. Work experience must be directly related to the student's declared major to be eligible. To register for this course, a student must have completed 50% of core coursework, maintain an overall GPA of 2.0 and a program specific GPA of 2.5

Course Pre-requisite(s)
Permission from Career Services Officer or Cooperative Education Officer

Credit Hours
2

Total Contact Hours

Total Instructor Contact Hours:
3

Total Student Contact Hours:
300

Course Fee
25

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
Student will submit a formal request in writing to the faculty and Associate Dean for work experience to be considered for Credit for Prior College-Level Learning.

The student will complete an interview, a reflective paper, or a presentation to the faculty in which the student develops and describes the learning objectives supported by the work experience, how those learning objectives were achieved and how that learning was put into practice.

Finally, the student must also provide a portfolio (or something comparable) that shows the work completed and provide some form of documentation confirming the work experience (a resume does not suffice) for which Credit for Prior College-Level Learning is requested.

Goals, Topics, and Objectives

Course Goals
Cooperative education helps students make the school-to-work transition, develop career and program-related learning objectives, and work on applicable skills for employment. Placements should provide students with the opportunity to apply and expand upon knowledge learned in the classroom, and develop the skills acquired in their coursework to align with the standards and expectations set by the worksite.

Core Course Topics

1. Professional Dress and Demeanor (attitude, posture, courteousness)
2. Workplace Communication
3. Interviewing Skills
4. Resume Building
5. Networking and Social Media
6. Seeking Employment
7. Career Advancement

1-3 program specific learning objectives will be developed by the instructor for each individual offering.
1-3 learning objectives per credit to be created by the student and approved by instructor for each individual offering.
Build a resume that meets standards of Career Services Officer.
List the reasons for professional attire.
Wear professional attire while on the worksite.
Attend career workshop in professional dress.
Display appropriate professional attitude and demeanor while on the worksite.
Interview effectively.
Attend mock interview, give appropriate answers to five questions.
Complete a written job application in a prompt, professional manner with all information legible, error-free, and thorough.
Differentiate the use of Social Media sites (Facebook, LinkedIn, and Twitter) during Career Services workshop.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Term Paper Weekly journal
Creation and attainment of all learning objectives
Participation in a career-focused workshop
Consistent and prompt attendance at worksite
Employer evaluation
Completion of 300 hours of work

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for HOSP 290

HOSP309 - Meetings and Event Planning

Overview

Subject
Culinary Arts, Hospitality Mgm

Academic Department
Culinary Arts + Hospitality Management

School
Business, Entrepreneurshp, PD

Course Description
Offers experience in identifying and analyzing factors that impact the events planned and organized by meeting planners. Main topics include meal functions, beverage functions, on premise and off premise catering, room setups, staffing, high and lower end events, supplier selection and contracts negotiation. Students plan and produce a special event for 300 guests.

Course Pre-requisite(s)
Satisfactory completion of ENG-081 or ENG-082 or higher, or a satisfactory score on the English placement exam.

Course Co-requisite(s)
Completion of or concurrent enrollment in HOSP105 Applied Food Serv Sanitation

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
62

Total Student Contact Hours:
62

Course Fee
25

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

- Define "catering" and recognize its importance in the management of various types of events.
- Explain the types, purpose, and applications of catering pricing systems.
- Apply methods for estimating the amount of food, beverage and labor needed for an event.
- Describe various types of food and beverage functions and their purposes.
- Forecast production and service needs.
- Calculate labor and employee benefit costs.
- Explain the typical caterers objectives.
- Determine which caterer to choose for a specific event.
- List types of catering staff meeting planners are likely to encounter.
- Describe the basic menu planning and design process.
- Explain the main differences among the various types of service styles.
- Determine food, beverage and labor needs.
- Articulate what caterers are willing to negotiate.
- Describe the difference between on-premise and off-premise catering.
- Describe the typical room setups caterers use.
- Explain the importance of space requirements and room appearance.
- Describe the typical process used by caterers to plan food and beverage production and service production.
- Determine the type, amount and cost of service labor needed.
- Describe the departments in the typical hotel or conference center that support the catering function.
- Describe the types of market segments caterers service.
- Explain the difference between low-cost events and deep market events.
- Develop a theme party menu.
- Resolve examples of problems that come up when working with outside caterers and suppliers.
- Describe the major challenges caterers face.
- Describe the typical outside suppliers meeting planners must deal with and how to work with them to achieve an events objectives.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Total Possible Points: 950 points

- Class Participation: 150 points
- Culinary Arts Notebook: 150 points
- Banquet: 100 points
- Individual Home Party Project: 100 points
- Review Questions (end of chapter): 150 points
- Final Comprehensive Exam: 100 points

Grading Scale

- 90% - 100% = A
- 80% - 89% = B
- 70% - 79% = C
- 60% - 69% = D
- 0% - 59% = E

Texts
• Meeting Planner's Guide To Catered Events, Patti J. Shock and John M. Stefanelli (Current Edition)
• Optional - Professional Cooking, Visual Food Gd & Wileyplus, Gisslen (Current Edition)

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for HOSP 309

HOSP310 - Hospitality Supervision and Leadership

Overview

Subject
Culinary Arts, Hospitality Mgm

Academic Department
Culinary Arts + Hospitality Management

School
Business, Entrepreneurshp, PD

Course Description
Explores topics such as, but not limited to: hotel marketing, management definition, management responsibilities, effective skills needed, effective communications, responsibilities for recruitment, selection, orientation and training employees, measuring labor productivity and controlling costs, evaluating and coaching employees, rules and regulations of discipline, structure of unions, and the collective bargaining process.

Course Pre-requisite(s)
HOSP211 Intro to Hospitality Industry

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
15

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. The Supervisor and Management Processes
2. Effective Communication
3. Recruiting and Selecting Employees
4. Employee Orientation and Training
5. Managing Productivity and Controlling Labor Costs
6. Evaluating and Coaching Employees
7. Discipline
8. Special Supervision Concerns
9. Building an Effective Team
10. Motivation Through Leadership
11. Structure of Unions and History of Organized Labor
12. Collective Bargaining Simulation
13. Managing Conflict
14. Time Management
15. Managing Change
16. Professional Development and Future Trends

Identify the three levels of management in most hospitality properties and the basic management processes.

Identify job tasks of managers in the hospitality industry.

Identify the common barriers to effective communication.

Explain the steps that supervisors can take to speak effectively on the job.

Compose a proper business memo.

Compose an effective business email.

Describe how supervisors work with the human resources department to recruit new employees.

Identify the benefits of training for the employee, the guest, the property, and the supervisor.

Identify factors that affect the learning process and adult learning needs.

Forecast business volume using the base adjustment forecasting method and the moving average forecasting method.

Distinguish coaching from counseling and disciplining.

Identify the components of a progressive disciplinary program.

List actions that supervisors can and cannot take to influence a union organizing campaign.

Describe issues supervisors should be aware of as they assume the role of team leader.

Identify the stages of team development.

Explain how supervisors can increase employee participation in department activities.

Identify steps supervisors should follow during a meeting with employees in conflict.

Distinguish high-priority interruptions from low-priority interruptions, and summarize strategies for dealing with the latter.

Apply techniques to develop and enhance an effective discipline program.

Identify possible causes of disciplinary problems.

Determine productivity standards.

Calculate the answers to a weekly department hourly labor report.

Calculate the answers to a Productivity Standard/Staffing Guide.

Define sexual harassment as defined by the EEOC and, through situational analysis, determine whether a situation would be considered to be sexual harassment.

List the steps in effective delegation.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
• Class Participation - 30 sessions (two per week) x 10 pts: 300 points
• Class Activities, Assignments & Chapter Case Studies: 140 points
• Chapter Tests (4 x 200 pts each): 800 points
• EEOC Exam: 60 points
Total Possible Grade Points: 1300

Grading Scale

- 90% - 100% = A
- 80% - 89% = B
- 70% - 79% = C
- 60% - 69% = D
- 0% - 59% = E

Texts
Supervision in the Hospitality Industry, by Kavanaugh/Ninemeier (Current Edition)

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for HOSP 310

HOSP325 - Dining Room Captain

Overview

Subject
Culinary Arts, Hospitality Mgm

Academic Department
Culinary Arts + Hospitality Management

School
Business, Entrepreneurshp, PD

Course Description
Covers advanced principles of table service and managing the production dining room. Emphasizes effective management procedures and techniques including scheduling, table assignments, side work, reservations, expediting, and training of the HOSP-150 students.

Course Pre-requisite(s)
HOSP251 Dining Room Service & Operati

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
62

Total Student Contact Hours:
62

Course Fee
135

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Hospitality: Managing Complaints
2. Hospitality: Generational Communication
3. Operations Management
4. POS Systems
5. Wine Essentials
6. Wine Terminologies, Food & Wine Pairing
7. Restaurant Menu and Service

Identify the job responsibilities and personal requirements of a dining service manager.

Supervise a dining room.

List the basic types of reservation systems and explain how to correctly handle reservation problems.

Perform the duties of a host/hostess.

Assign duties to dining room personnel.

Interpret and analyze POS information.

Evaluate the performance of other serving staff personnel.

Describe the ways to handle customers with complaints and special needs and demonstrate ways to handle them.

Prepare and serve a variety of tableside dishes.

Discuss the manufacturing and composition of a variety of wine, beer, and spirits.

Explain the procedures for opening and serving wine.

Describe how wine labels differ depending on where the wine is grown or produced.

List the four (4) conditions that impact how wine turns out.

Explain the difference between Champagne and Sparkling Wine.

List the four (4) major categories of grapes and give an example of each.

Explain how wines get their color.

List the most common terms used to describe wine.

Describe methods of determining a guest's age.

Identify the traits of an intoxicated guest.

Explain how to refuse to serve an intoxicated guest.

Describe the legal requirements of responsible alcohol service.

Achieve ServSafe Alcohol Certification.

Achieve FDRP Wine Steward Associate Certification

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
- 11 Weeks of Service (11 x 30 pts each): 330 points
- Classroom Quizzes (9 x 10 pts each): 90 points
- FDRP Chapter Tests (7 x 15 pts each): 105 points
- Special Event Work: 8 Hours: 60 points
- Written Paper: 50 points
- FDRP WSA Certification Exam: 50 points

Total Possible Grade Points: 685

Grading Scale
- 90% - 100% = A
- 80% - 89% = B
- 70% - 79% = C
- 60% - 69% = D
- 0% - 59% = E

Texts
Federation of Dining Room Professional online training and certification Serv-Safe Alcohol training and certification Guest Service Gold training and certification

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for HOSP 325

HOSP330 - Food and Nutrition

Overview

Subject
Culinary Arts, Hospitality Mgm

Academic Department
Culinary Arts + Hospitality Management

School
Business, Entrepreneurshp, PD

Course Description
Examines basic concepts of nutrition, food composition, food technology, controversies in nutrition, and marketing nutrition in the food service business. Covers carbohydrates, fats, protein, vitamins, RDA, food labeling, menu planning, weight management, cardiovascular disease, nutrition and cancer, and modifying recipes for health and lower calorie content.

Course Pre-requisite(s)
Satisfactory completion of ENG-081 or ENG-082 or higher, or a satisfactory score on the English placement exam.

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
25

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Introduction to Nutrition
2. Dietary Recommendations
3. Carbohydrates
4. Lipids: Fats and Oils
5. Protein
6. Vitamins
7. Water and Minerals
8. Healthy Menus and Recipes
9. Marketing Healthy Menu Options
10. Beverage Operation
11. Nutrition and Health
12. Nutrition and Health for the Vegetarian
13. Weight Management and Exercise
14. Nutrition Over the Life Cycle

Identify current USDA My Plate principles and food groups.

List the nutrient contributions of each food group.

Discuss the nine areas where dietary guidelines make recommendations (Proteins, Minerals, Vitamins, Water, Fiber, Total Fats, Saturated Fats, Starch/Sugars, Total Calories and Sodium).

Develop recipes and menus using the dietary guideline recommendations, food guides and food labels.

Evaluate recipes and menus using dietary guideline recommendations, food guides and food labels.

Discuss characteristics, functions and best sources for each of the major nutrients.

List the primary characteristics, functions and sources of vitamins, water and minerals.

Describe the process of human digestion.

Determine energy needs based upon basal metabolic rate and exercise expenditure.

Discuss and demonstrate cooking techniques and storage principles and portion sizes for maximum retention of nutrients and effective weight management.

Discuss exchange groups.

Identify common food allergies and determine appropriate substitutions (i.e. gluten, sugar, lactose-free).

Discuss contemporary nutrition issues (i.e. vegetarianism, heart-healthy menus, and religious dietary laws).

Apply technology (computers) for nutrient analysis.

Discuss marketing of healthy menu options.

Discuss weight management and exercise and nutrition over the life cycle.

Discuss how alcohol affects the body.

Evaluate food choices based on a diabetic diet pattern.

Complete research on a nutritional subject.

Discuss fad diets, supplements and diet claims.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Total Possible Grade Points: 550

- Class Assignments (10 x 5 pts each): 50 points
- Attendance: 30 points
- Paper: 20 points
- Class Project: 100 points
- Progress Tests (5 x 50 pts each): 250 points
- Final Exam (Comprehensive): 100 points

Grading Scale

- 90% - 100% = A
- 80% - 89% = B
- 70% - 79% = C
- 60% - 69% = D
- 0% - 59% = E

Texts
Introduction to Nutrition for Food Service and Culinary Professionals, by Karen Eich Drummond (Current Edition)

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for HOSP 330

HOSP331 - Modern and European Pastry

Overview

Subject
Culinary Arts, Hospitality Mgm

Academic Department
Culinary Arts + Hospitality Management

School
Business, Entrepreneurshp, PD

Course Description
Offers advanced study of commercial baking techniques and procedures. Stresses the fundamentals of baking along with the production and presentation of cakes and pastries. Course work provides in-depth instruction in designing, baking, and decorating wedding cakes, fondant cakes, European pastries, petit fours, and other specialty desserts.

Course Pre-requisite(s)
HOSP105 Applied Food Serv Sanitation and HOSP340 A'la Carte and Buffet Cookery

Credit Hours
6

Total Contact Hours
Total Instructor Contact Hours:
107

Total Student Contact Hours:
107

Course Fee
190

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. History of Baking
2. Cake Mixing Methods; Basic Cake Decorating
3. Basic Baking Principles
4. Specialty Cakes
5. Pie and Fillings
6. Fruit Desserts
7. Royal Ice Design Skills
8. Art of Writing
9. Basic Syrups, Creams and Sauces
10. Custard, Pudding, Mousses and Soufflés
11. Frozen Desserts
12. Special Diets
13. Cookies
14. Decorating
15. Plated Desserts

Explain basic baking terms and how they pertain to baking.

Identify baking equipment and their uses in baking.

Understand and identify the properties of ingredients, and their impacts on baked products and how to correct problems.

Use the proper measuring equipment to measure out ingredients, and explain the importance of weighing baking ingredients.

Understand proper safety and sanitation procedures in the pastry kitchen.

Apply the correct formula necessary for conversion methods of recipes.

Produce and evaluate varieties of cake batters from sponge to genoise.

Create and evaluate the variations of frosting that are used in the assembling and finishing of tortes, gateaux and bite-size pastries.

Explain how to create laminated dough and the uses for it in baking. Also create pate au choux and the many uses for it in sweet to savory desserts.

Assemble and prepare a variety of frostings and fillings for tortes and pastries.

Demonstrate the assembly of a wedding cake and special occasion cake, with inscription, flowers and borders.

Understand and identify the different varieties of chocolate and how they are used in the bakery.

Produce and evaluate custards, puddings and mousses and how they pertain to baking and their many uses.

Create dessert sauces and discuss how they are used in plated dessert presentations.

Demonstrate the proper way of using marzipan, gum paste, glazes and rolled fondant in enrobing of cakes and pastry.

Produce and evaluate the varieties of meringues and how they are used in baking.

Understand the difference between ice cream, gelato, sorbet and frozen desserts.

Create and produce fresh fruit desserts, from fruit tarts to poached fruit, and understand how to select the proper fruits and how to handle them.

Discuss the application of mixes and other value-added product and they pertain to the industry.

Demonstrate proper presentation of baked goods and pastries, and evaluate the quality of presentation.

Discuss nutritional concerns to baking recipe modification to create nutritionally beneficial desserts and baked goods.

Demonstrate the difference between an individual and full-size dessert, and how to create them.

Design desserts for presentation using plate painting.

Explain the many components that go into a plate presentation.

Perform the procedure to create a balanced flavor composition in desserts, as well as pastries.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
• Class Evaluation (15 sessions x 20 pts each week): 300 points
• Assignments and Quizzes: 100 points
• Notebook/Folder: 100 points
• Banquet/Event Participation: 100 points
• Final Exam - Written: 100 points
• Final Exam - Practical: 100 points
Total Possible Grade Points: 800

Grading Scale

- 90% - 100% = A
- 80% - 89% = B
- 70% - 79% = C
- 60% - 69% = D
- 0% - 59% = E

Texts
Professional Baking, by Wayne Gisslen (Current Edition)

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for HOSP 331

HOSP340 - A'la Carte and Buffet Cookery

Overview

Subject
Culinary Arts, Hospitality Mgm

Academic Department
Culinary Arts + Hospitality Management

School
Business, Entrepreneurshp, PD

Course Description
Provides practical experience in all areas of quality food preparation by rotating throughout each station of the a'la carte kitchen. Students explore the proper techniques of broiling, sauteing, meat cutting, dessert presentation, buffet preparation, and cold food stations in the on campus, student-run restaurant.

Course Pre-requisite(s)
HOSP105 Applied Food Serv Sanitation and HOSP226 Fundamentals of Baking

Credit Hours
8

Total Contact Hours
Total Instructor Contact Hours:
152

Total Student Contact Hours:
152

Course Fee
85

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Menus, Recipes, and Cost Management
2. Cooking Healthful Meals
3. Food Presentation and Garnish
4. Mise en Place
5. Cooking Meats and Game
6. Cooking Poultry and Game Birds
7. Cooking Fish and Shellfish
8. Cooking Vegetables
9. Legumes, Grains, and Pasta
10. Cooking for Vegetarian Diets
11. Salad Dressings and Salads
12. Sandwiches
13. Breakfast Preparation

Calculate and forecast purchase and preparation requirements.

Calculate food costs, beverage costs, and percentages.

Perform recipe yield conversions and recipe costing.

Determine selling prices of items by making calculations using current technology including a computer or calculator.

Explain inter-relationships and work flow between dining room and kitchen operations.

Demonstrate knife skills, hand tool, and equipment operation while emphasizing proper safety techniques.

Identify the parts/components of a standard recipe. Use standard recipes. Write a standard recipe.

Identify and properly use utensils, pots, and pans and demonstrate safe practices using stoves, mixers, ovens, etc.

Define and describe the sautéing process, prepare foods using the sauté technique. Evaluate the quality of sautéed items.

Define and describe the processes of pan frying and deep frying.

Define and describe the roasting and baking processes. Compare and contrast roasting to baking, poeling, smoke roasting and spit roasting. Roast meats, poultry and fish to the correct doneness. Evaluate the quality of roasted items.

Define and describe the processes of grilling and broiling. Grill and broil foods to the proper doneness. Evaluate the quality of grilled and broiled items.

Define and describe the processes of braising and stewing, noting the similarities and differences. Braise and stew foods to the proper doneness. Evaluate the quality of braised and stewed items.

Define and describe the process of shallow poaching. Prepare shallow poached food properly and produce a sauce that incorporates the cooking liquid. Evaluate the quality of shallow poached items.

Define poaching and simmering and correctly identify the temperature at which each occurs. Poach and simmer foods to the proper doneness. Evaluate the quality of poached and simmered foods.

Define and describe the boiling and steaming processes. Prepare boiled and steamed foods to the proper doneness. Evaluate the quality of boiled and steamed foods.

Utilize weights and measures to demonstrate proper scaling and measurement techniques.

Identify and use herbs, spices, oils and vinegar, condiments, marinades and rubs. Evaluate the quality of herbs, spices, oils and vinegar, condiments, marinades and rubs.

Perform basic fabrication tasks with meat, poultry, seafood and variety meats. Cook meat, seafood, and variety meats to the proper doneness. Evaluate the quality of prepared meats, seafood, poultry and variety meats.

Identify and prepare a variety of fruits, vegetables, starches, legumes and grains. Evaluate the quality of prepared fruits, vegetables, starches, legumes and grains.

Identify, define, describe, and prepare a variety of salad dressings. Evaluate the quality of salad dressings.

Identify, prepare and dress a variety of salad greens and components. Evaluate the quality of properly prepared and dressed salads.

Identify, describe, and prepare a variety of composed salads. Evaluate the quality of composed salads.

Identify and describe the purpose and elements of a sandwich. Prepare and evaluate a variety of hot and cold sandwiches.

Describe a variety of preparation techniques used in egg cookery, cook eggs using a variety of preparation techniques. Evaluate the quality of prepared eggs.

List basic menu planning principles, identify principles of menu layout and design. Create menu item descriptions following established truth in menu guidelines.

Plan a variety of menus, develop a menu layout for a food service operation.

Demonstrate acceptable procedures when preparing potentially hazardous foods to include time/temperature principles.

Review MSDS Sheets and explain their requirements in handling hazardous materials. Discuss right to know laws.

List common causes of typical accidents and injuries in the food service industry and outline a safety management program. Demonstrate emergency policies for kitchen and dining room injuries.

Describe appropriate types and uses of fire extinguishers used in the food service area. Review laws of the regulatory agencies governing sanitation and safety in food service operation.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Total Possible Grade Points: 980

- Class participation - first 2 weeks (4 sessions x 10 pts): 40 points
- Class participation (12 weeks x 20 pts x 2 sessions per week): 480 points
- Class quizzes (4 x 30 pts): 120 points
- Wiley Plus Homework: 80 points
- Menu Assignment: 100 points
- Banquets/Events: 60 points
- Final Exam - Written: 60 points
- Final Lab Practical: 40 points

Grading Scale

- 90% - 100% = A
- 80% - 89% = B
- 70% - 79% = C
- 60% - 69% = D
- 0% - 59% = E

Texts
Professional Cooking by Wayne Gisslen (Current Edition) with WileyPlus on-line component

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for HOSP 340

HOSP341 - Garde Manger & Menu Planning

Overview

Subject
Culinary Arts, Hospitality Mgm

Academic Department
Culinary Arts + Hospitality Management

School
Business, Entrepreneurshp, PD

Course Description
Emphasizes the art of food preparation with a focus on cold foods. Covers the preparation and presentation of salads, sandwiches, hors d'oeuvres, cold sauces and dressing, pate/terrine, and sausage. Offers in-depth instruction in catering, menu planning, and American cuisine leading sauces and their respective small sauces.

Course Pre-requisite(s)
HOSP105 Applied Food Serv Sanitation and HOSP331 Modern and European Pastry

Credit Hours
6

Total Contact Hours
Total Instructor Contact Hours:
107

Total Student Contact Hours:
107

Course Fee
190

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. The Professional Garde Manger
2. Cold Sauces and Soups
3. Salads and Sandwiches
4. Cured and Smoked Foods
5. Sausage
6. Terrines, Patés, Galantines, and Roulades
7. Cheese
8. Appetizers and Hors D'oeuvres
9. Condiments, Crackers, and Pickles
10. Buffet Presentation
11. ACF Competition Rules and Guidelines
12. American Regional Cuisine
13. Cooking with Wine, Beer, and Spirits
14. Herbs, Gardening, Local Foods, and Farm Markets
15. Market Orders, Product Descriptions, and Market Forms

Analyze centerpieces for buffet or show presentation.
Describe the rules for a certified culinary salon.
Demonstrate the preparation of hors d'oeuvres and appetizers.
Identify and describe varieties of cheese.
Explain the procedures for making various types of sausage.
Recognize and identify aspects of regional American cuisine.
Enumerate and discuss classical leading sauces and their respective small sauce derivatives.
Explain how liquors are used in cooking.
Identify commonly used variety meats.
Discuss various types of buffets.
Design a layout for a theme buffet.
Create a salon-quality cold buffet to meet rules set by the American Culinary Federation.
Write an Excel-based market order with correct product descriptions and accurate forecast of quantities.
Prepare a variety of salads, pickles, and cured food using different methods.
Demonstrate advanced knife skills and classical cuts.
Prepare a variety of cold garnishes.

Prepare a cold food display of carved fruit or vegetables.

Design, prepare and evaluate cold party trays.

Define aspic gelée and describe it's functions. Demonstrate fundamental skills in the preparation and uses of aspic.

Identify tools and equipment used garde manger, emphasizing safety and sanitation procedures.

Prepare and evaluate mousse.

Prepare and evaluate paté.

Prepare and evaluate terrine.

Prepare and evaluate sausage.

Prepare emulsified sauces.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
• Class Evaluation (15 sessions x 20 pts each): 300 points
• Assignments and Quizzes: 100 points
• Notebook/Folder: 100 points
• Banquet/Event Participation: 100 points
• Final Written Exam: 100 points
• Final Practical Exam: 100 points
Total Possible Points: 800

Grading Scale

- 90% - 100% = A
- 80% - 89% = B
- 70% - 79% = C
- 60% - 69% = D
- 0% - 59% = E

Texts
Garde Manger: The Art and Craft of the Kitchen, Current Edition Professional Cooking, Wiley Plus on-line component, by Wayne Gisslen, (current edition)

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for HOSP 341

HOSP360 - Hospitality Purchasing

Overview

Subject
Culinary Arts, Hospitality Mgm

Academic Department
Culinary Arts + Hospitality Management

School
Business, Entrepreneurshp, PD

Course Description
Explains standard procedures for purchasing food, and beverages and services for hotels, restaurants, and institutions. Emphasizes distribution, product line, government regulations, packaging, comparative versus price buying, yields, inventory, and quality controls.

Course Pre-requisite(s)
HOSP211 Intro to Hospitality Industry

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
25

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. The Flow of Goods
2. Product Specifications
3. Service Specifications
4. Distribution
5. Corporate Purchasing Programs
6. Compliance
7. Financial Analysis of Purchasing Decisions

Discuss the concept of farm to fork, including the flow of goods in a food service operation.

Analyze market fluctuations and product cost.

Discuss legal and ethical considerations of purchasing.

Explain regulations for inspecting and grading of meats, poultry, seafood, eggs, dairy products, fruits and vegetables.

Write a bid specification.

Evaluate received goods to determine conformity with user specifications.

Conduct yield and quality tests on items such as canned, fresh, frozen, and prepared product by computing the edible (or usable) yield percentage.

Inventory food and non-food items using current technology.

Define and describe par stock.

Identify food bio-terrorism laws and RFID technology and the impact these regulations and technology have on food safety and sanitation.

Describe five elements of a corporate purchasing system.

Outline the vendor selection process.

Identify supplier support and sales tasks.

Participate in a trade show and product sampling.

List and describe different types of purchasing contracts.

Define compliance.

Perform a product match and market basket analysis.

Define strategic sourcing.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
• Class Attendance and Participation (15 sessions x 2 pts each): 30 points
• Can Cutting Exercise: 40 points
• Yield Costing Exercise: 40 points
• Equipment Purchasing Exercise: 40 points
• Trade Show Exercise: 40 points
• Progress Tests (4 x 70 pts each): 280 points
• Final Exam: 80 points
Total Possible Grade Points: 550

Grading Scale

- 90% - 100% = A
- 80% - 89% = B
- 70% - 79% = C
- 60% - 69% = D
- 0% - 59% = E

Texts
Modern Food Service Purchasing, by Robert Garlough

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for HOSP 360

HOSP370 - Food and Beverage Controls

Overview

Subject
Culinary Arts, Hospitality Mgm

Academic Department
Culinary Arts + Hospitality Management

School
Business, Entrepreneurshp, PD

Course Description
Emphasizes cost calculations of food, wine, spirits, supplies, and labor in order to understand a profit and loss statement. Presents the forecasting, production planning, inventory, and ordering cycle with the aid of MS Excel and web-based ordering systems. Also examines how buying decisions are made by utilizing calculations of yield and best value, along with government regulations and ethics.

Course Pre-requisite(s)
HOSP340 A'la Carte and Buffet Cookery

Course Co-requisite(s)
Completed or concurrent enrollment in CIS100 Intro Info Tech

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
25

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Managing Revenue and Expense
2. Creating Sales Forecasts
3. Purchasing and Receiving
4. Managing Inventory and Production
5. Monitoring Food and Beverage Product Costs
6. Managing Food and Beverage Pricing
7. Managing the Cost of Labor
8. Controlling Other Expenses
9. Analyzing Results Using the Income Statement
10. Planning for Profit
11. Maintaining and Improving the Revenue Control System
12. Cost/Volume/Profit Analysis
13. Menu Analysis

List fixed costs.
Explain how fixed costs are controlled.
List variable costs.
Explain how variable costs are controlled.
Write a product specification.
Compute the edible portion cost of a serving of food.
Apply the formula necessary to decide whether to purchase convenience proportioned food, or to purchase raw ingredients and produce items from scratch.
Describe and explain different grades when purchasing meat, seafood, produce and grocery items.
Calculate check average.
Prepare an income statement (P&L) for a business.
Identify information necessary to prepare various forecasts used in a food and beverage operation.
Determine the amount of food that will be needed during the next order period by creating a forecast.
Calculate the selling price of menu items.
Calculate popularity index for menu items.
Identify and discuss spirits and their relationship to food in a bar or restaurant.
Identify and discuss types of beer and wine and their relationship to food in a bar or restaurant.

Compute the popularity index for menu items to forecast portion sales.

Calculate the standard cost of any drink, given a standard recipe and the current market price of ingredients.

Calculate the standard cost-to-sales ratio for any drink, given it's standard cost and sales price.

Identify and discuss the costs involved with theft.

Identify and discuss the costs involved with waste.

Discuss Michigan beer, wine and spirit laws.

Discuss how alcoholic beverages are obtained through distribution in Michigan.

List common vendor payment terms.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement

- Class Attendance and Participation (15 sessions x 5 pts) 75 points
- Homework Assignments: (25 pts x 11) 275 Points
- Chapter Tests (5 x 60pts each): 300 points
- Physical inventory assignment: 50 points
- Final Exam: 100 points
  Total Possible Grade Points: 800

Grading Scale

- 90% - 100% = A
- 80% - 89% = B
- 70% - 79% = C
- 60% - 69% = D
- 0% - 59% = E

Texts
Food and Beverage Cost Controls and Study Guideby Lea R. Dopson (Author), David K. Hayes (Author) with Wiley Plus on-line component access.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for HOSP 370

HOSP421 - Professional Strategies for Culinarians

Overview

Subject
Culinary Arts, Hospitality Mgm

Academic Department
Culinary Arts + Hospitality Management

School
Business, Entrepreneurshp, PD

Course Description
Covers careers in the culinary field across multiple interrelated segments including lodging, restaurants, managed / contract services, and travel and tourism. Examines how to perform an analysis of trends and current opportunities for entry-level management positions. Also discusses strategic career planning including use of the DISC profile questionnaire.

Course Pre-requisite(s)
BEC151 Prin Macro Economics and either ENG132 College Writing and Research or ENG135 Bus & Tech Writing & Research

Credit Hours
4

Total Contact Hours
Total Instructor Contact Hours:
62

Total Student Contact Hours:
62

Course Fee
25

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Hospitality Philosophy
2. Professional/Industry Organizations
3. Corporate Organizational Reporting Structures
4. Industry Trends
5. Industry Trade Periodicals
6. Workforce Readiness Analysis
7. Personal Mission Statement
8. Career Options
9. Professional Development Planning

Define hospitality and the philosophy of the hospitality industry.

Identify professional organizations within the field; explain purposes and benefits.

Outline the organization, structure, and functional areas in various hospitality organization, structure and functional areas in various hospitality organizations.

Discuss / evaluate industry trends as they relate to career opportunities and the future of the industry.

Discuss and evaluate industry trade periodicals.

Analyze your skills

Analyze your interests

Analyze your values

Analyze your personality type

Create a personal mission statement

Analyze your personal flexibility

Research jobs using online resources

Research specific companies using online resources

Evaluate your options

Choose an occupation

Implement your career choice

Create a professional development plan for your entire career

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
• Class Assignments • Reflection Paper • Resume Updates • Career Development Project

Grading Scale

- 90% - 100% = A
- 80% - 89% = B
- 70% - 79% = C
- 60% - 69% = D
- 0% - 59% = E

Texts
• Seven Habits of Highly Effective People study version, Steven Covey (current edition) -How to Win Friends and Influence People, Dale Carnegie (current edition) • DISC Profile / on - line access, Wiley (included)

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for HOSP 421

HOSP490 - Co-Op in Culinary Arts

Overview

Subject
Culinary Arts, Hospitality Mgm

Academic Department
Culinary Arts + Hospitality Management

School
Business, Entrepreneurshp, PD

Course Description
Cooperative Education is a structured method of combining classroom-based education with practical work experience. A cooperative education experience commonly known as "co-op" provides academic credit for structured employment experience. Work experience must be highly specialized or at the supervisory level in the Culinary field.

Course Pre-requisite(s)
HOSP370 Food and Beverage Controls

Credit Hours
2

Total Contact Hours
Total Instructor Contact Hours:
3

Total Student Contact Hours:
300

Course Fee
25

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Hospitality Philosophy
2. Your Employer's Organizational Reporting Structure
3. Your professional/industry organization
4. Trends in your segment
5. Professional Presentation and Communication

Define hospitality and the philosophy of the hospitality industry.
Identify professional organizations within the segment; explain purposes and benefits.
Outline the organization, structure, and functional areas of your employer.
Discuss/evaluate segment trends as they relate to career opportunities and the future of the segment.
1-3 individualized learning objectives developed by the instructor.
1-3 individualized learning objectives developed by the student.
Build a resume that meets Career Services Office standards.
List the reasons for professional attire.
Wear professional attire while on the worksite.
Display appropriate professional attitude and demeanor while on the worksite.
Interview effectively; attend a mock interview and give appropriate answers to five questions.
Complete an online or written application to employer specifications (get the job).
Differentiate appropriate social media sites (Facebook, LinkedIn, and Twitter) during career services workshop.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement

- Major final project
- Weekly Journal
- Creation of learning objectives
- Employer Evaluation
- Completion of 300 work hours

Grading Scale

- 90% - 100% A
- 80% - 89% B
- 70% - 79% C
- 60% - 69% D
- 0% - 59% E

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for HOSP 490

HPE130 - Stress Management

Overview

Subject
Exercise Science

Academic Department
Health, Education, and Human Services

School
Health & Human Services

Course Description
This course integrates research and theories on the nature of normal and abnormal stress, their impact on physical and mental health, and effective management strategies. It examines intrapersonal and interpersonal stressors, in family, work, and society settings. It will guide students to identify specific attitudes, behaviors, and coping skills as well as target areas for improvement.

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Skilled Demonstration, Portfolio Review, Licensure/certifications

Credit for Prior College Level Learning (CPCLL) Details
Minimum Departmental Exam Score

C

Fees associated with Credit for Prior College Level Learning application
0.00

Departmental Exam Details

Licensure as Wellness Coach and other Stress Management related certifications.

Goals, Topics, and Objectives

Core Course Topics

1. The normal stress response
2. Chronic or abnormal stress response
3. Stress management intrapersonal techniques
4. Stress management interpersonal techniques

Explain the normal, physiological responses to stressors.
Compare and contrast between acute and chronic stress.
Identify chronic stressors and their impact on physical and mental health.
Define stress-related disorders and their impact overall health.
Describe the impact of physical exercise for managing stress.
Describe the impact of for managing stress techniques (e.g., deep breathing, some types of meditation, yoga, hobbies).
Analyze the effectiveness of problem-solving and decision-making strategies.
Create a time management plan using organization skills.
Identify interpersonal stressors in families, work or society settings.
Identify the pillars of healthy relationships in families, work or society settings.
Identify relationships and family conflict resolution and use of stress management strategies.
Identify occupational conflict resolution and stress management strategies.
Develop an interpersonal family or work plan using problem-solving strategies.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Exams, quizzes, journals, discussion boards, presentations, paper, special projects.

Grading Scale
Percentage Grade:

- 100% - 96% = A+
- 95% - 93% =A
- 92% - 89% = A-
- 88% - 86% = B+
- 85% - 82% = B
- 81% - 79% = B-
- 78% - 75% = C+

- 74% - 71% = C
- 70% - 63% = D
- 62% and below = E

Texts
Open Educational Resources

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for HPE 130

HPE141 - Introduction to Health and Wellness

Overview

Subject
Exercise Science

Academic Department
Health, Education, and Human Services

School
Health & Human Services

Course Description
Assesses current level of wellness and provides the tools necessary to improve and motivate the student to practice healthier lifestyles throughout adulthood. Covers environmental, reproductive, and psychological health; stress management; infectious disease; nutrition; chronic disease; aging; and physical fitness.

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
10

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Goals, Topics, and Objectives

Course Goals
To help students understand the multiple dimensions of health across the life span and the impact that lifestyle choices can have on overall health and well-being.

Core Course Topics
1. Health: The foundation for life
2. Reproductive health
3. Drug use and abuse
4. Alcohol and tobacco
5. Environmental health
6. Nutrition
7. Body weight and management
8. Psychological health
9. Stress and its management
10. Violence and abuse
11. Physical fitness
12. Infectious disease
13. Chronic Disease
14. Diagnosis, prevention, and cancer treatment
15. Aging, dying, and death

Analyze quackery and fraud in wellness and recall how and where to find legitimate answers to health questions.

Recall methods and effectiveness of methods for family planning. Illustrate what behaviors increase the risk of sexually transmitted disease, how to recognize these diseases, and ways to protect from them.

Evaluate risk for drug/alcohol misuse.

Recall characteristics of drug/alcohol misuse. Recognize the dangers of smoking and how best to stop a smoking habit.

Evaluate physical surroundings for environmental hazards.

Demonstrate the basis of a healthy diet.

Demonstrate how healthy fat loss, weight gain, and weight maintenance is achieved.

Recall the characteristics of positive psychological health.

Recognize stressors in life and demonstrate various tools to help alleviate these stresses. Evaluate stress level and skills useful in controlling stress.

Recognize symptoms of abuse and how to seek assistance.

Design a program for improvement of strength, cardiovascular endurance, muscular endurance and flexibility. Recognize what is considered a good level of physical fitness.

Describe actions that decrease risk of infectious disease.

Evaluate risk for developing disease (cancer, diabetes, and cardiovascular) and learn ways to decrease this risk.

Develop a plan to decrease risk of cancer, heart disease, and diabetes.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of academic achievement will be identified and implemented by the class instructor. Methods will include, but not be limited to, individual projects, vocabulary, class participation (discussion and critiques), and tests.

Grading Scale

- 94-100% = A
- 90 - 93% = A-
- 87 - 89% = B+
- 83 - 86% = B
- 80 - 82% = B-
- 77 - 79% = C+
- 73 - 76% = C
- 70 - 72% = C-
- 67 - 69% = D+
- 63 - 66% = D
- 60 - 62% = D-
- Below 60% = E

Texts
To be determined by the instructors that teach the course. All sections should use the same agreed upon textbook.

Satisfies Wellness Requirement
Yes

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for HPE 141

HPE151 - Methods for Teaching Exercise

Overview

Subject
Exercise Science

Academic Department
Health, Education, and Human Services

School
Health & Human Services

Course Description
Provides a hands-on approach to demonstrating the skills that are necessary to lead group exercise instruction as well as personal training. Presents a variety of methods to lead exercise. NOTE: Also helps prepare students interested in taking industry certification exams (e.g. ACSM, ACE, and NSCA) in personal training, group exercise instruction, and weight management, but certification exams are not included in this course.

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
10

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Principles of adherence and motivation
2. Human anatomy
3. Kinesiology
4. Nutrition
5. Exercise physiology
6. Posture, proprioception, balance, and flexibility
7. Key components of class design
8. Exercise and movement selection, sequencing, choreography, program modifications, and music selection
9. Leading exercise one-on-one
10. Legal considerations with leading exercise
11. Exercise variety

Demonstrate a fitness library of information to cover components of fitness and other health topics to share with clients.

Recognize the primary muscle movers associated with a variety of exercises for strength and flexibility.

Demonstrate exercises through all planes of the body.

Apply basic principles of healthy eating to exercise clients.

Describe how chronic and acute exercise changes muscle physiology.

List ways to improve balance, flexibility, posture, and proprioception.

Apply various communication and teaching techniques presented in class and from various media (video, print, Internet).

Demonstrate how to train the components of physical fitness. Compose an aerobic exercise routine and a strength exercise sequence.

Synthesize proper exercises for various populations based upon safety and effectiveness.

Describe the legal issues (e.g. music copyright and injury liability) that are specific to the fitness industry.

Observe a variety of different exercise classes.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of academic achievement will be identified and implemented by the class instructor. Methods will include, but not be limited to, individual projects, vocabulary, class participation (discussion and critiques), routine and exercise presentations, and tests.

General Course Requirements and Recommendations
Students are required to observe exercise classes and one-on-one training outside of the classroom.

Texts
To be determined by the instructor.

Satisfies Wellness Requirement
Yes

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for HPE 151

HPE158 - Introduction to Nutrition

Overview

Subject
Exercise Science

Academic Department
Health, Education, and Human Services

School
Health & Human Services

Course Description
An introductory focused on the basics of nutrition. Topics covered include digestion, planning nutritious diets, evaluating nutrition information, energy nutrients, food safety, nutrition at different life stages, energy balance and weight control. This class provides you with the skills necessary to follow a nutritious diet that will positively impact health throughout life.

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
10

Academic Level
Undergraduate

Goals, Topics, and Objectives

Course Goals
This class will introduce the basic concepts of nutrition. The emphasis is on the students' diet and on eating healthy for a lifetime.

Core Course Topics

1. The basics of nutrition
2. Evaluating nutrition information
3. Digestion, Absorption, and Transport of Nutrients
4. Carbohydrates, lipids, and proteins
5. Vitamins
6. Water and minerals
7. Energy balance and weight control
8. Nutrition and physically active lifestyles
9. Food safety
10. The role of nutrition in preventing chronic disease
11. Eating disorders
12. Nutrition at different life stages

Demonstrate how to evaluate nutrition health claims.
Practice using the various diet analysis programs available (e.g. MyPlate, Dietary Guidelines).
Compare and contrast the digestion of carbohydrates, lipid, and protein.
Distinguish between the good and bad fats. Plan meals and snacks that reduce animal protein intakes. Recognize the functions of carbohydrates, lipids, and protein.
Evaluate the use of vitamin supplements with respect to their potential health benefits and hazards. Recall the roles of the major vitamins. List food sources for the major vitamins.
Describe roles of minerals in achieving and maintaining good health.
Restate the principles of energy balance. Calculate weight gain, weight loss, and weight balance in a variety of subjects.
Design an individualized exercise program that includes all the components of health-related physical fitness. Summarize the role of exercise in weight management.
Describe procedures that can reduce the risk of foodborne illness. Differentiate between different pathogens that cause foodborne illness.
Paraphrase major health risks associated with excess body fat.
Outline major kinds of eating disorders, including risk factors and treatments for these conditions.
Compare the nutritional composition of infant formula with breast milk. Elaborate on the nutrition difference in nutrient composition at the different life stages.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of academic achievement will be identified and implemented by the class instructor. Methods will include, but not be limited to, individual projects, vocabulary, class participation (discussion and critiques), diet analysis projects, laboratories, and tests.

General Course Requirements and Recommendations
Completion of diet analysis with diet analysis software.

Texts
Choice of textbook is left up to the discretion of the instructor.

Satisfies Wellness Requirement
Yes

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for HPE 158

HPE162 - Introduction to Exercise Science

Overview

Subject
Exercise Science

Academic Department
Health, Education, and Human Services

School
Health & Human Services

Course Description
This course provides a foundation that students will need to be successful in future classes in exercise science, sports medicine, and fitness leadership. Sample topics covered in the class include sports nutrition, sports psychology, exercise physiology, exercise prescription, motor behavior, biomechanics, as well as an exploration into the career possibilities in the field.

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Academic Level
Undergraduate

Goals, Topics, and Objectives

Course Goals
The goal of this class is to provide the student with the necessary knowledge and experiences to succeed in further study of exercise science. This course provides information on scientific principles of exercise and their applications within the field of exercise science/kinesiology.

Core Course Topics

1. Introduction to Exercise Science
2. Introduction to Research in the Exercise Field
3. Exercise Physiology
4. Sports Medicine
5. Exercise and Sport Nutrition
6. Exercise and Sport Psychology
7. Motor Behavior and Biomechanics
8. Equipment and Assessment in Exercise Science
9. Professional Issues in Exercise Science

Examine the scientific study of human movement and its historical beginnings.
Explain the many and varied benefits of regular exercise and physical training.
Recognize standard research tools and the scientific process.
Discriminate between scientifically valid and invalid sources of exercise science information.
Describe basic structure and function of the human circulatory, skeletal, endocrine and muscular systems.
Distinguish the anaerobic and aerobic processes that provide energy for the working muscle.
Determine basic emergency treatment for common sport injuries and medical emergencies.
Illustrate the interaction of exercise, nutrition, and body composition.
Elaborate on the influence of personality, motivation, stress, and social factors on participation in physical activity.
Describe the study of biomechanics in relation to our understanding of human movement.
Identify the diversity of human motor performance and learning.
Utilize the basic tools and procedures to assess fitness levels and health risk.
List professional organizations and publications in the discipline of Exercise Science.
Identify current issues within the fields of Exercise Science.
Recognize the occupational opportunities available to Exercise Science majors.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Academic achievement will be assessed including but not limited to the following methods:

- Group discussions
- Chapter quizzes
- Homework assignments
- Observations
- Demonstrations
- Presentations
- Group projects

Grading Scale
Grading scale for exams and the final grade:

- 98-100% = A+
- 93-97% = A
- 90-92% = A-
- 87-89% = B+
- 83-86% = B
- 80-82% = B-
- 76-79% = C+
- 70-75% = C
- 67-69% = D+
- 63-66% = D
- 60-62% = D-
- 59% & below = E

Texts
American College of Sports Medicine Introduction to Exercise Science

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for HPE 162

HPE170 - Principles of Personal Training

Overview

Subject
Exercise Science

Academic Department
Health, Education, and Human Services

School
Health & Human Services

Course Description
Offers preparation for the American College of Sports Medicine (ACSM), the American Council on Exercise (ACE) Personal Trainer Certification Exam and other organizations. Covers the theories and practices necessary to create personalized exercise plans for clients and administer correct and safe exercise instruction. Consists of weekly three hours of online theory and two hours of hands-on activities in an exercise science lab setting.

Credit Hours
4

Total Contact Hours
Total Instructor Contact Hours:
77

Total Student Contact Hours:
77

Course Fee
30

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Licensure/certifications

Credit for Prior College Level Learning (CPCLL) Details
Licensure/Certification

Current ACSM, ACE, or comparable certification as a personal trainer.

Goals, Topics, and Objectives

Course Goals
The goal of this course is to prepare the student to train clients in a safe and knowledgeable manner after attaining certification.

Core Course Topics

1. Role of Personal Trainer and Scope of Practice
2. Science for Professional Trainers: Exercise Physiology, Human Anatomy, and Biomechanics
3. Screening and Evaluation: Health Screening, Testing and Evaluation, Functional Assessments and Physiological Assessments
4. Principles and Methods of Training: Developing exercise programs
5. Principles of Motivation and Behavior Change
6. Business and legal aspects of personal training

Determine the scope of practice of a Personal Trainer Discuss professional career environment and industry trends.
Identify anatomical structures of the musculoskeletal system.
Explain and demonstrate the biomechanical principles of movement.
Explain muscle contraction and energy systems.
Explain and demonstrate the physiological mechanisms of systems applied to exercise training.
Discuss the energy substrates for health and performance.
Explain and demonstrate the initial client consultation.
Describe participation guidelines Demonstrate fitness assessments techniques
Construct a comprehensive program design.
Develop and demonstrate resistance, cardiorespiratory, flexibility, and balance training programs.
Identify program options for special populations.
Identify metabolic and cardiovascular risk factors.
Describe the theories of behavior change.
Describe the principles of adherence to exercise
Demonstrate eliciting positive perceptions through effective coaching techniques.
Describe business types and employment opportunities for personal trainers
Discuss legal issues and responsibilities of personal trainers.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Written Exams

Demonstration of correct and safe exercises and teaching techniques

Practical Exam: design safe, science-based personal training programs for various populations.

Grading Scale
Percentage Grade:

- 100% - 96% = A+
- 95% - 93% =A
- 92% - 89% = A-
- 88% - 86% = B+
- 85% - 82% = B
- 81% - 79% = B-
- 78% - 75% = C+
- 74% - 71% = C
- 70% - 63% = D
- 62% and below = E

Satisfies Wellness Requirement
Yes

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for HPE 170

HPE175 - Introduction to Sports Management

Overview

Subject
Exercise Science

Academic Department
Health, Education, and Human Services

School
Health & Human Services

Course Description
This course provides a comprehensive overview of the field of sport management, exploring its key concepts, principles, and applications. Students will gain a solid understanding of the historical development of sport management, the various segments within the industry (youth, community, scholastic, professional, and international sports), trends, and the essential managerial and leadership skills required for success in this dynamic field.

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Foundations of Sport Management
2. Managerial Roles and Responsibilities:
3. Career Opportunities in Sports management
4. Leadership and Ethics in Sports Management
5. Sustainability practices
6. Sport Management Education and Research

Explore the history of Sports Management

Identify the fundamental principles and theories related sport management.

Explain the diverse roles and responsibilities of sport managers in various organizations, from clubs and leagues to professional teams.

Explore potential career paths within the sport management industry, including job opportunities and the skills needed to succeed.

Develop essential leadership skills crucial for effective management in sports management.

Explore the ethical challenges and responsibilities faced by sport managers in today's complex landscape.

Describe the importance of sustainability practices in the sports industry and how to incorporate them into management strategies.

Explore educational opportunities for undergraduate research in the field.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Formative and summative lecture exams and quizzes. Writing assignments and discussion forum participation. Guide research

Grading Scale

- 100% - 96% = A+
- 95% - 93% =A
- 92% - 89% = A-
- 88% - 86% = B+
- 85% - 82% = B
- 81% - 79% = B-
- 78% - 75% = C+
- 74% - 71% = C
- 70% - 63% = D
- 62% and below = E

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for HPE 175

HPE200 - Exercise Facility, Equipment, and Safety

Overview

Subject
Exercise Science

Academic Department
Health, Education, and Human Services

School
Health & Human Services

Course Description
Training for how to build exercise facilities, purchase exercise equipment, and prevent and treat injuries associated with exercise.

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
30

Academic Level
Undergraduate

Goals, Topics, and Objectives

Course Goals
To provide the knowledge and skills needed to operate an exercise facility following the guidelines of the American College of Sports Medicine. Skills needed for to safely respond and treat exercise related injuries.

Core Course Topics

1. Emergency Preparedness
2. Legal Responsibilities
3. Equipment Selection
4. Professional Organizations
5. Assessment of Injuries
6. Emergency care for sports injuries

Design an emergency procedures plan for a facility.

Discuss how the American with Disabilities Act impacts a facility.

Perform a facility/equipment safety check that is followed regularly.

Describe how to choose appropriate equipment for pools, fitness centers, locker rooms, gymnasiums, and child care centers.

Recall what trade organizations are available to help with the establishment of an exercise facility.

Perform an initial assessment and determine chief complaint.

Perform a focused assessment.

Describe the recognition and treatment for musculoskeletal injuries, cardiac conditions, environmental emergencies, breathing emergencies, and metabolic emergencies.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of academic achievement may include, but not be limited to case studies, quizzes, lab reports, group projects, individual projects, discussions, essays, and exams.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for HPE 200

HPE212 - Measurement & Prescription of Fitness &

Overview

Subject
Exercise Science

Academic Department
Health, Education, and Human Services

School
Health & Human Services

Course Description
Examines various tests used for evaluating the health-related and skill-related components of physical fitness. Includes tests for body composition, flexibility, cardiovascular endurance, muscular endurance, muscular strength, speed, agility, and power. Students will learn how to interpret test results and accurately recommend exercise programs for improvement.

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
30

Academic Level
Undergraduate

Goals, Topics, and Objectives

Course Goals
Students will learn to accurately measure the skill and health-related components of fitness using a variety of assessments. In addition, students will interpret test results and recommend exercise for improvement of the components of fitness.

Core Course Topics

1. Introduction to Statistics
2. Health-related physical fitness
3. Skill-related physical fitness
4. Metabolic fitness
5. Preparation for change

Demonstrate calculation of basic statistical calculations (e.g. mean, median, and ranking).

Explain steps to follow when measuring the components of health-related physical fitness.

Interpret results of various fitness tests.

List exercises to improve components of health-related physical fitness.

Explain steps to follow when measuring the components of skill-related physical fitness.

Interpret results of various skill-related fitness tests.

List exercises to improve components of skill-related physical fitness.

Define metabolic fitness.

Justify lifestyle changes based on metabolic fitness results.

Demonstrate successful blood pressure measurement.

Calculate waist/hip girth measurements.

List tools available to access readiness for change in lifestyle (e.g. smoking cessations, beginning an exercise program, weight loss).

Describe tools for motivating clients.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of academic achievement may include, but not be limited to case studies, quizzes, lab reports, group projects, individual projects, discussions, essays, and exams.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for HPE 212

HPE224 - Sports Facilities

Overview

Subject
Exercise Science

Academic Department
Health, Education, and Human Services

School
Health & Human Services

Course Description
This course provides an understanding of the key principles, practices, and challenges involved in planning, designing, and managing of sport facilities. It also includes topics, including facility planning and design, staff management, marketing strategies, revenue generation, ancillary services, scheduling and operating.

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Sports and fitness facilities planning and management
2. Industry standards for sport and fitness facilities
3. Emergency management
4. Equipment trends
5. Personnel training and professional development

Recognize the principles of planning and managing sports and fitness facilities.

Identify the various components of indoor and outdoor sport and fitness facilities.

Analyze industry standards and regulations used to educate staff and public using sports and fitness facilities.

Interpret industry standards for planning, design, and operation of sports and fitness facilities.

Identify design and construction regulations

Discuss effective emergency management policies and procedures to address public access risks.

Identify public safety guidelines for appropriate response to incidents.

Identify and analyze emerging trends in sport and fitness facilities equipment and technology to stay updated with industry advancements.

Analyze training programs for professional staff, independent contractors, and the public to promote safe and responsible use of sport and fitness facilities.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Exams, quizzes, observation report, discussion forum, written assignments, special projects.

Grading Scale
Percentage Grade:

- 100% - 96% = A+
- 95% - 93% =A
- 92% - 89% = A-
- 88% - 86% = B+
- 85% - 82% = B
- 81% - 79% = B-
- 78% - 75% = C+
- 74% - 71% = C
- 70% - 63% = D
- 62% and below = E

Texts
Determined by the department.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for HPE 224

HPE253 - Nutrition for the Professional

Overview

Subject
Exercise Science

Academic Department
Health, Education, and Human Services

School
Health & Human Services

Course Description
Introduces health care professionals to the basics of nutrition and its application to disease, growth, and development.

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
10

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Foundations of Nutrition
2. Planning a Healthy Diet
3. Digestion, Absorption, and Transport
4. Energy Nutrients: Carbohydrates, fat, and protein
5. Metabolism and Energy Balance
6. Weight Maintenance
7. Vitamin and Mineral Supplementation
8. Water
9. Nutrition through the Lifecycle
10. Nutrition and Disease

Explain how to prescribe diets that include food that the patient/client will eat. Explain the role family support and motivation play in achieving success with diet changes.

Experiment with the use of various online tools to prescribe a healthy diet (e.g. MyPlate, Dietary Guidelines). Discuss the components of a healthy diet.

Explain the steps of digestion, absorption, and transport of nutrients.

Explain the role that carbohydrates, lipids, and protein have in nutrition.

Define the components of energy balance. Recall factors that increase and decrease metabolism.

Analyze pros and cons of various weight loss regimens. Demonstrate an understanding of how to motivate and teach people about weight gain, weight loss, and weight maintenance.

Describe the function and food sources for major vitamins and minerals.

Recount the effects of dehydration. Recall appropriate fluid intakes.

Diagram changes in macronutrient requirements at the different life states.

Discuss the role nutrition has in the development of disease, and in the treatment and prevention of disease such as diabetes, GI disorders, heart disease, and cancer. Apply the principles of sound nutrition to clients/patients with specific problems such as diabetes or heart disease through case studies.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of academic achievement will be identified and implemented by the class instructor. Methods will include, but not be limited to, individual projects, vocabulary, class participation (discussion and critiques), diet analysis project, laboratories, and tests.

Texts
Textbook for course to be selected by instructor.

Satisfies Wellness Requirement
Yes

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for HPE 253

HPE258 - Principles of Strength Training

Overview

Subject
Exercise Science

Academic Department
Health, Education, and Human Services

School
Health & Human Services

Course Description
Teaches the student how to establish comprehensive strength training programs for a variety of populations. Lessons focus on applied physiology of muscle contraction, proper and safe strength training exercise techniques, nutritional factors affecting performance, bioenergetics, program design, and periodization.

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
30

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Licensure/certifications

Credit for Prior College Level Learning (CPCLL) Details
Certification by the National Strength and Conditioning Association or equivalent

Licensure/Certification Details

Valid certification from the National Strength and Conditioning Association or equivalent certification.

Goals, Topics, and Objectives

Course Goals
Teaches principles of strength training to prepare the student to work in entry level fitness industry positions with athletes and clients with general and/or special needs.

Core Course Topics

1. Biomechanics of Resistance Exercise
2. Bioenergetics of Aerobic and Anaerobic Exercise
3. Adaptations to Resistance Training Programs
4. Nutritional Strategies for Maximizing Performance
5. Program Design for Resistance Training
6. Program Design for Speed, Agility, and Power Training
7. Program Design for Special Populations

Demonstrate the proper technique for a variety of upper and lower body exercises.

Identify aerobic and anaerobic contributions to exercise.

Explain the neural, muscular, connective tissue, and endocrine responses to an acute and chronic strength-training program.

Outline recommendations for pre and post workout nutrition needs.

Outline recommendations for pre-competition, during-event, and post-competition nutrition needs.

Illustrate principles of resistance training prescription including 1) goals, 2) exercise selection, 3) training frequency, 4) exercise order, 5) resistance and repetitions, 6) volume, and 7) rest periods.

Describe techniques to develop speed, agility, and power.

Plan a resistance-training program for a variety of populations including children, elderly, and female.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of academic achievement may include, but not be limited to case studies, quizzes, projects, group assignments, demonstrations, discussions, and exams.

Grading Scale
Percentage Grade:

- 100% - 96% = A+
- 95% - 93% =A
- 92% - 89% = A-
- 88% - 86% = B+
- 85% - 82% = B
- 81% - 79% = B-
- 78% - 75% = C+
- 74% - 71% = C
- 70% - 63% = D
- 62% and below = E

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for HPE 258

HPE262 - Health & Phys Ed for Elementary Teachers

Overview

Subject
Exercise Science

Academic Department
Health, Education, and Human Services

School
Health & Human Services

Course Description
This course provides the theoretical framework of elementary and middle school health, physical activity, and safety curriculum. Students will gain knowledge and skills for the elementary classroom teacher on methods used to integrate health, nutrition, safety, and physical education into their daily curriculum. The course includes teaching strategies, projects, movement exercises, and games designed to engage the Pre-Elementary Education major. Developmental sequences and the health needs of children from elementary through middle school is included. Course emphasis is on providing learning experiences for children's development of lifelong positive health and fitness behaviors. Particular attention is given to the national health standards as well as the Michigan Model Modules.

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
50

Academic Level
Undergraduate

Goals, Topics, and Objectives

Course Goals
The goal of this class is to equip the future elementary education teacher with a strong knowledge base of the philosophy, theory and research of elementary physical education and health.

Core Course Topics

1. Foundations of Elementary and Middle School Health Education
2. Development of Positive Skills for Healthy Dietary and Physical Activity Habits
3. Management of Health Risk Issues
4. Fine and Gross Motor Skill Development
5. National and State Health Education Standards
6. Physical Activity and Curriculum Integration
7. Elementary and Middle School Student Developmental Changes
8. Infectious Diseases and Prevention
9. Lesson Plans Integrating Movement
10. Skill themes and movement concepts in educational gymnastics, dance, games, & cross-curricular fitness activities
11. Pros and Cons of Technology and Elementary Students' Physical Activity

Explain the health and physical education foundations behind current health education initiatives.

Analyze the effects of positive and negative dietary and physical activity habits on elementary and middle school student development.

Discuss current health risks involving the elementary and middle school student.

Create an age-appropriate health risk pamphlet.

Compare and contrast the different ways fine and gross motor skills are developed through physical activity.

Explain the purpose of the National and State health education standards.

Identify how these standards are met in the elementary and middle school setting.

Create a cross-curricular lesson plan integrating physical and health concepts.

Identify the differences in developmental changes from elementary through middle school.

Identify the infectious disease processes related to the elementary and middle school student.

Create age-appropriate lesson plan(s) addressing infectious diseases and prevention.

Create a cross-curricula lesson plan integrating movement.

Create a portfolio of educational physical activities, dances, games, and cross-curricular fitness activities.

Identify ways to engage students in physical activity at home and school with or without technology.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of academic achievement may include but not be limited to lesson plan creation, class discussion, tests, essays, ability to use and create elementary and middle school student health and physical education activities.

General Course Requirements and Recommendations
This course is a hybrid course: 50% on-ground and 50% on-line.

Grading Scale
As determined by the instructor.

Texts
Telljohann, Symons, Pateman, & Seabert; **Health Education Elementary and Middle School Applications**, current edition. **Michigan Model for Health** Grade level materials

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for HPE 262

HPE270 - Exercise Physiology

Overview

Subject
Exercise Science

Academic Department
Health, Education, and Human Services

School
Health & Human Services

Course Description
Explores the physiological principles of exercise with emphasis on the circulatory, respiratory, and muscular systems. Discusses what changes occur to the body during exercise and as a result of regular exercise. Establishes a scientific basis for how to prescribe exercise appropriately. Laboratory activities include measurement of oxygen uptake, fat and muscle composition, anaerobic ability, and muscular strength.

Course Pre-requisite(s)
BIO233 Anatomy and Physiology I and BIO234 Anatomy and Physiology II

Credit Hours
4

Total Contact Hours
Total Instructor Contact Hours:
77

Total Student Contact Hours:
77

Course Fee
30

Academic Level
Undergraduate

Goals, Topics, and Objectives

Course Goals
To develop a scientific understanding for the principles of exercise.

Core Course Topics

1. Common Measurements in Exercise Physiology
2. Bioenergetics of Exercise
3. Exercise and the Immune System
4. The Nervous Systems Control of Movement
5. Respiration During Exercise
6. Circulatory Response to Exercise
7. Nutrition and Energy
8. Body Composition and its Role in Performance
9. Exercise in Challenging Environments
10. Ergogenic Aids to Performance
11. Laboratory - Health Screening
12. Laboratory - Pulmonary Function
13. Laboratory - Measurement of VO2max
14. Laboratory - Body Composition Assessment
15. Laboratory - Measurement of Muscular Power
16. Laboratory - Measurement of Absolute and Relative Muscular Strength
17. Laboratory - Electromyography

Describe the measurement of work, power, energy expenditure, and economy

Examine the differences in aerobic and anaerobic exercise

Summarize the effect exercise has on the immune system

Explain the role of the nervous system in muscle contraction

Describe the structure and mechanics of breathing during exercise

Examine the circulatory systems response to exercise

Examine the role of nutrition in energy production

Evaluate methods of measuring body composition

Evaluate how to exercise safely in the heat, cold, and at high altitudes

Evaluate the effectiveness of various pharmacological and nutritional aids to performance

Demonstrate measurement of blood pressure, heart rate, and resting and exercise electrocardiogram

Evaluate static and dynamic pulmonary function

Compare estimations of VO2max

Calculate lean body mass and fat mass

Graph the differences in aerobic and anaerobic power in classmates

Explain the differences in absolute and relative muscular strength

Conclude the primary muscle mover in several exercises

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of academic achievement may include, but not be limited to case studies, quizzes, lab reports, group projects, individual projects, discussions, essays, and exams.

Grading Scale

- 100% - 96% = A+
- 95% - 93% =A
- 92% - 89% = A-
- 88% - 86% = B+
- 85% - 82% = B
- 81% - 79% = B-
- 78% - 75% = C+
- 74% - 71% = C
- 70% - 63% = D
- 62% and below = E

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for HPE 270

HPEA110 - Volleyball I

Overview

Subject
Exercise Science

Academic Department
Health, Education, and Human Services

School
Health & Human Services

Course Description
Covers the fundamental skills, strategy, history, rules, and values of volleyball. Discusses concept of team play and how to develop an appreciation for the sport as both player and spectator. Course also explores nutrition and health related fitness as it pertains to disease and weight prevention.

Credit Hours
2

Total Contact Hours
Total Instructor Contact Hours:
32

Total Student Contact Hours:
32

Course Fee
10

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
Determined by department.

Goals, Topics, and Objectives

Course Goals
HPEA110 Volleyball I is designed to teach beginner and intermediate volleyball skills while covering historic highlights as well as providing exposure to game strategy.

Core Course Topics
1. Cardiovascular training, flexibility, strength training and nutrition as it pertains to disease prevention and weight management.
2. Player positions and strategy.
3. Proper techniques-passing, setting,serving, spiking, setting and court management.
4. Rules and etiquette.
5. Terminology.
6. History of the game.

Demonstrate proper volleyball skills: passing, setting, court management, spiking and serving, and strategy.

Explain the basic volleyball terminology and the history of its evolution.

Demonstrate an awareness of healthy eating habits and training as it relates to disease prevention and weight management.

List player positions and how positions interrelate.

Assess fitness levels and demonstrate proper training techniques.

Describe the general history of the games' evolution.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
1. Skill tests on volley, set, spike, and serve
2. Quizzes on textbook readings
3. Project demonstration - class may participate in a skills drill or conditioning activity
4. Participation
5. Final exam

Grading Scale
- 94-100% = A
- 90 - 93% = A-
- 87 - 89% = B+
- 83 - 86% = B
- 80 - 82% = B-
- 77 - 79% = C+
- 73 - 76% = C
- 70 - 72% = C-
- 67 - 69% = D+
- 63 - 66% = D
- 60 - 62% = D-
- Below 60% = E

Texts
To be determined by the instructor.
Satisfies Wellness Requirement
Yes

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for HPEA 110

HPEA117 - Strength Training & Physical Cond I

Overview

Subject
Exercise Science

Academic Department
Health, Education, and Human Services

School
Health & Human Services

Course Description
Introduces beginning and intermediate training techniques in strength and cardiovascular conditioning including evaluation of all components of physical fitness. Emphasizes flexibility, strength, cardiovascular conditioning, muscular endurance, and body composition. Course also includes information on nutrition and exercise as it relates to weight management and disease prevention, and discusses common risk factors.

Credit Hours
2

Total Contact Hours
Total Instructor Contact Hours:
32

Total Student Contact Hours:
32

Course Fee
10

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
Determined by department.

Goals, Topics, and Objectives

Course Goals
HPEA117 Strength Train & Phys Cond I is a sequential course designed to teach beginner and intermediate conditioning skills. The goal is to provide the knowledge and skills to live a healthy life.

Core Course Topics
1. Introduction to equipment, safety and training guidelines.
2. Proper mechanics for exercise, injury prevention, and benefits.
3. Components of fitness including flexibility, strength, cardiovascular and muscular endurance, body composition, and how to achieve higher fitness levels.
4. Assessment of fitness components and evaluation.
5. Other forms of resistive training equipment, including exercise balls, tubing, body weight and core exercises.
6. Exercises to develop the upper and lower body, abdominal muscles, and exercises to develop speed and power.
7. Nutrition, diet, and exercise as it relates to weight control.
8. Risk factors that cause diseases and preventive behavior.
9. Disease prevention, including cardiovascular training to prevent cardiovascular disease; strength training to prevent osteoporosis; weight control to prevent diabetes (Type 2); and other related problems.

Demonstrate strength training principles and proper techniques (fitness).

Discuss the components of fitness including flexibility, strength, cardiovascular and muscular endurance and body composition, and how to achieve higher level of fitness.

Explain related information regarding strength training (fitness).

Discuss risk factors that cause diseases and behaviors that lead to disease prevention.

Discuss a healthy diet, exercise, and nutrition as it relates to weight control (diet).

Assess and evaluate fitness levels after skills tests are taken (fitness).

Demonstrate an improved awareness of safety, proper use of equipment, and injury prevention.

Demonstrate knowledge of preventive health skills as well as cardiovascular training to prevent cardiovascular disease, strength training to prevent osteoporosis, and weight control to prevent diabetes (Type 2) and other related problems.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
1. Skill tests on strength, flexibility, cardiovascular endurance, muscular endurance and body composition.
2. Participation.
3. Written final exam.

Grading Scale
- 94-100% = A
- 90 - 93% = A-
- 87 - 89% = B+
- 83 - 86% = B
- 80 - 82% = B-
- 77 - 79% = C+
- 73 - 76% = C
- 70 - 72% = C-
- 67 - 69% = D+
- 63 - 66% = D

- 60 - 62% = D-
- Below 60% = E

Texts
To be determined by the instructor.

Satisfies Wellness Requirement
Yes

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for HPEA 117

HPEA122 - Yoga-Based Fitness

Overview

Subject
Exercise Science

Academic Department
Health, Education, and Human Services

School
Health & Human Services

Course Description
Explains how to improve overall body awareness and fitness while presenting specific techniques to manage stress through the practice of relaxation, meditation, and asanas (postures). Covers how to find stillness; to practice deep breathing and postures; to improve mind-body awareness and self confidence; and to make healthy lifestyle choices.

Credit Hours
2

Total Contact Hours

Total Instructor Contact Hours:
32

Total Student Contact Hours:
32

Course Fee
10

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
Determined by department

Goals, Topics, and Objectives

Course Goals
To help students learn and use the skills of Yoga to improve overall physical fitness, health, mental discipline, and self-awareness.

Core Course Topics
1. Breath and postures.
2. Skeletal-muscular anatomy.
3. Stress management.
4. Nutrition
5. Disease, and injury prevention and care.
6. Yoga philosophies.

Identify the postures and explain their benefits with breath control.

Identify basic skeletal-muscular anatomy and explain their functions as they apply to Yoga.

Analyze current health and make positive changes for overall body care, control and awareness to manage stress.

Analyze current diet and make positive changes for a healthy diet.

Analyze current health and fitness and make positive changes and choices for disease and injury prevention.

Apply basic Yoga philosophies including non-judgmental attitudes toward self and others and non-reactivity.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of academic achievement will be identified and implemented by the class instructor. Methods will include, but not be limited to, individual projects, vocabulary, class participation (discussion and critiques), and tests.

Texts
Text to be determined by the instructor.

Satisfies Wellness Requirement
Yes

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for HPEA 122

HPEA155 - Relaxation Techniques for Stress Mgmt.

Overview

Subject
Exercise Science

Academic Department
Health, Education, and Human Services

School
Health & Human Services

Course Description
Covers stress and its effects on the body. Emphasizes ways to reduce stress such as Yogic breathing, meditation, and other relaxation techniques. Discusses time and money management; conflict resolution and effective communication; resolving anxiety; a healthy diet, and how to incorporate these into one's lifestyle.

Credit Hours
2

Total Contact Hours

Total Instructor Contact Hours:
32

Total Student Contact Hours:
32

Course Fee
10

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
Determined by department

Goals, Topics, and Objectives

Course Goals
To effectively learn how to incorporate various skills and techniques for managing stress into one's everyday life.

Core Course Topics
1. Stress
2. Journaling
3. Relaxation Techniques Overview
4. Physical Activity and Exercise
5. Diet
6. Effective Communication
7. Anger Management and Problem Solving
8. Anxiety
9. Time Management
10. Money Management

Define and explain stress, stressors and their effects on the body. (stress management)

Create and write a personal mission statement.* (stress management)

Keep a log of thoughts, feelings and ideas in words and pictures. (stress management)

Explain and practice Yoga breathing, meditation, progressive muscle relaxation, visual imagery, and humor for stress management. (stress management)

Explain the effects of physical activity for stress management. (fitness)

Choose and practice effective activities for managing stress. (fitness)

Explain and practice healthy diet choices for managing stress. (diet and disease prevention)

Analyze current ways of communicating, and develop skills for effective listening, empathizing, being assertive, and communicating with clarity.* (stress management)

Analyze current approaches to solving problems, dealing with anger and resolving conflicts and develop ways of improving problem solving, resolving conflict and managing anger.* (stress management)

Examine current level of anxiety, develop coping mechanisms, and practice ways to reduce anxiety.* (stress management)

Analyze current use of time, and formulate goals, establish priorities, and create a realistic schedule. (stress management)

List barriers to time management and time wasters. (stress management)

Analyze current spending and create a budget.* (stress management)

Set goals for short, medium and long term. (stress management)

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement

- Assignment: define and explain stress, list personal stressors, and explain their effects on the body.
- Assignment: keep a log throughout the term and journal thoughts, feeling, and ideas in words and pictures and create a personal mission statement.
- Movement exam: illustrate Yoga and other deep breathing techniques and progressive muscle relaxation.
- Assignment: explain the effects that physical activity have on managing stress and formulate a plan for incorporating a chosen activity into one's life.
- Assignment: record daily diet and compare against a selected standard. Make recommendations for improvement.
- Class work: role play to practice listening, empathizing, assertiveness and communicating with clarity. Assignment: Write an assertive letter as a consumer or citizen.
- Class work: using selected approaches and models, practice role playing to manage anger, creatively solve problems, and effectively resolve conflicts.
- Assignment: log contexts of anxiety and develop ways to handle effectively.
- Assignment: formulate short, medium and long term goals, establish a daily schedule with priorities and implement. Examine personal barriers to effectively managing time and make adjustments for improvement.
- Assignment: analyze personal spending habits and budget. Construct short, medium and long term money goals and design a savings plan to ascertain everything on the goal's lists as well as an efficient budget.

Assessment Plan for Wellness General Education Outcome

- Faculty will develop an assessment tool to evaluate the three areas of Wellness necessary to establish a positive pattern of lifelong wellness choices.
- The assessment tool will be administered at the beginning and end of the course.
- A minimum of two sections of each course will be randomly selected for evaluation.
- The assessment tool will be given in the fall, 2013 and data will be evaluated in the winter, 2014.
- Recommendations for changes will be implemented in the fall, 2014.

Satisfies Wellness Requirement
Yes

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for HPEA 155

HPEA210 - Volleyball II

Overview

Subject
Exercise Science

Academic Department
Health, Education, and Human Services

School
Health & Human Services

Course Description
Covers both fundamental and advanced skills as well as strategy, history, rules, and values of volleyball. Student gains valuable social experience and develops a sense of team play along with an appreciation for the sport as a player and a spectator. Nutrition and health related fitness information is included as it pertains to disease prevention and weight control.

Credit Hours
2

Total Contact Hours

Total Instructor Contact Hours:
32

Total Student Contact Hours:
32

Course Fee
10

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Goals, Topics, and Objectives

Course Goals
HPEA210 Volleyball II is designed to teach fundamental and advanced volleyball skills, while covering historic highlights as well as exposure to game strategy.

Core Course Topics

1. Cardiovascular training, flexibility, strength training and nutrition as it pertains to disease prevention and weight management.
2. Player positions and strategy.
3. Proper techniques-passing, setting, serving, spiking, setting and court management.
4. Rules and etiquette.
5. Terminology.
6. History.

Demonstrate proper volleyball skills: (Passing, setting, spiking, serving, strategy, and court management).
Explain the basic volleyball terminology and history of its evolution.
Explain how the volleyball court is set up, rules of play, basic etiquette, and scoring procedures.
Demonstrate an awareness of healthful eating habits and training as it relates to disease prevention and weight management.
List player positions and how positions interrelate.
Assess fitness levels and demonstrate proper training techniques.
Analyze successful technique of professional volleyball players.
Lead in class tournament play.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement

1. Skill tests on volley, set, spike, and serve
2. Quizzes on textbook readings
3. Project demonstration - class may participate in a skills drill or conditioning activity
4. Participation
5. Final Exam

Grading Scale

- 94-100% = A
- 90 - 93% = A-
- 87 - 89% = B+
- 83 - 86% = B
- 80 - 82% = B-
- 77 - 79% = C+
- 73 - 76% = C
- 70 - 72% = C-
- 67 - 69% = D+
- 63 - 66% = D
- 60 - 62% = D-
- Below 60% = E

Texts
To be determined by the instructor.
Satisfies Wellness Requirement
Yes

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for HPEA 210

HPEA217 - Strength Training & Physical Condit II

Overview

Subject
Exercise Science

Academic Department
Health, Education, and Human Services

School
Health & Human Services

Course Description
Explores the principles of intermediate and advanced strength and cardiovascular conditioning including evaluation of all components of physical fitness. Emphasizes flexibility, strength, cardiovascular conditioning, muscular endurance, and body composition. Also covers nutrition and exercise as it relates to weight management and disease prevention, and risk factors.

Credit Hours
2

Total Contact Hours
Total Instructor Contact Hours:
32

Total Student Contact Hours:
32

Course Fee
10

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
Determined by department

Goals, Topics, and Objectives

Course Goals
HPEA217 Strength Train & Phys Cond II is a sequential course designed to teach intermediate and advanced conditioning skills. The goal is to provide the knowledge and skills to live a healthy life.

Core Course Topics

1. Introduction to equipment, safety, and training guidelines.
2. Proper mechanics for exericse, injury prevention, and benefits.
3. Components of fitness including flexibility, strength, cardiovascular and muscular endurance; body composition; and how to achieve higher fitness levels.
4. Assessment of fitness components and evaluation.
5. Other forms of resistive training equipment, including exercise balls, tubing, body weight and core exercises.
6. Exercises to develop the upper and lower body, abdominal muscles, and exercises to develop speed and power.
7. Nutrition, diet, and exercise as it relates to weight control.
8. Risk factors that cause disease and preventative behavior.
9. Disease prevention including cardiovascular training to prevent cardiovascular disease, strength training to prevent osteoporosis, weight control to prevent diabetes (Type 2), and other related problems.

Demonstrate strength training principles and proper techniques (fitness).

Discuss the components of fitness including flexibility, strength, cardiovascular and muscular endurance.

Demonstrate knowledge of how to achieve higher levels of fitness (fitness).

Explain physiological information regarding strength training (fitness).

Discuss risk factors that cause disease and behaviors that lead to disease prevention.

Discuss a healthy diet, exercise and nutrition as it relates to weight control (diet).

Assess and evaluate fitness levels after skills tests are taken (fitness).

Demonstrate an improved awareness of safety, proper use of equipment, and injury prevention.

Demonstrate knowledge of preventive health skills as well as cardiovascular training to prevent cardiovascular disease, strength training to prevent osteoporosis, and weight control to prevent diabetes (Type 2), and other related problems.

Design an individualized personal training program or related fitness assignment.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement

1. Skill tests on strength, flexibility, cardiovascular endurance, muscular endurance and body composition
2. Participation
3. Personal training program or related fitness assignment
4. Written final exam

Grading Scale

- 94-100% = A
- 90 - 93% = A-
- 87 - 89% = B+
- 83 - 86% = B

- 80 - 82% = B-
- 77 - 79% = C+
- 73 - 76% = C
- 70 - 72% = C-
- 67 - 69% = D+
- 63 - 66% = D
- 60 - 62% = D-
- Below 60% = E

Texts
To be determined by the instructor.

Satisfies Wellness Requirement
Yes

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for HPEA 217

HUM101 - Introduction to the Humanities

Overview

Subject
Humanities

Academic Department
Humanities

School
Liberal Arts

Course Description
Introduces the study of global humanities using an interdisciplinary approach. Focuses on the central concepts and the fundamental nature of the visual arts, music, drama, religion, philosophy, literature, and architecture. Stresses appreciation of the humanities through the study of individual works as well as group approaches. Focuses on the aesthetic and technical aspects of the humanities, as well as the understanding of the humanities in light of historical and cultural conditions.

Course Pre-requisite(s)
Eligible to take ENG courses at HFC.

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
10

Academic Level
Undergraduate

General Education Category
Humanities and Fine Arts

Michigan Transfer Agreement (MTA) Category
Category 5: Humanities and Fine Arts - Applied Degrees, Category 5: Humanities and Fine Arts - Transfer Degrees

Goals, Topics, and Objectives

Course Goals
To increase students' knowledge of the humanities and introduce students to the major figures, historical periods, and themes in the history of humankind.

Core Course Topics
1. Disciplines within the humanities
2. The various genres of music, literature, the arts (visual, dance, theater), and architecture.
3. Major religious and political structures present in the time-periods studied
4. Major leaders, philosophers, artists, and figures of the time-periods studied
5. The inter-related nature of politics, the arts, and culture throughout history

Examine how the arts, philosophy, religion, and/or language reflect and shape humanity and the values of cultures.

Explain major terms and concepts of the humanities from the various time periods.

Identify and appraise major artistic and philosophical works from representative cultural periods and social movements.

Develop an understanding of cross-cultural intersectionality as reflected in languages, the arts, religion, or philosophy.

Critically evaluate artistic, literary, and philosophical works and their contribution to the human experience.

Contrast the changing genres and styles of the humanities that marked different historical periods and cultures

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
1. Students should have a variety of assessments including written essays, oral presentations, and/or multi-media/multi-genre projects.
2. Students will complete at least one project critiquing a work of visual, musical, or literary art
3. Students will complete at least one project comparing two different time-periods
4. Students will write at least one essay (which may meet one of the requirement of the projects above).

General Course Requirements and Recommendations
1. This course is to be an interdisciplinary study of humanity throughout its existence.
2. While an instructor can choose a specific timeframe or theme to focus upon, there should be an emphasis on using multiple disciplines and various media to explore with students the story of humankind.
3. Instructors should consider focusing on a given time periods or cultural themes. (For example: Renaissance, Medieval, Enlightenment, Ancient or "Death and Dying", "The Nature of Humankind", "Technology and the Root of Humanity")
4. An emphasis should be placed on the interconnectivity of disciplines in the humanities and the natural progression and evolution of philosophical and/or social movements.

Texts
Please see the department chair for text options.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for HUM 101

HUM105 - World Civilization I

Overview

Subject
Humanities

Academic Department
Humanities

School
Liberal Arts

Course Description
Introduces major themes and events in World History from the Ancient to the Early Modern Periods through the study of the arts (fine and performing), architecture, literature, religions, and/or philosophies of (selected) World Civilizations.

Course Pre-requisite(s)
Eligible to take ENG courses at HFC.

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
10

Academic Level
Undergraduate

General Education Category
Humanities and Fine Arts

Michigan Transfer Agreement (MTA) Category
Category 5: Humanities and Fine Arts - Applied Degrees, Category 5: Humanities and Fine Arts - Transfer Degrees

Goals, Topics, and Objectives

Course Goals
To introduce students to great works of World arts, literature, religion, architecture, and/or philosophy in their historical contexts. Emphasis will be on the interconnection of the Humanities and History, as well as the interconnection of the world cultures and civilizations relevant to each theme. The World Civilizations included will vary depending on the theme of the individual class, but inclusion of at least one non-Western Civilization is strongly encouraged.

Core Course Topics

1. Major historical events, movements, trends, and figures of World Civilizations
2. Major artistic, architectural, literary, and philosophical works of World Civilizations
3. Major religions and religious developments of World Civilizations
4. The roles of peoples (e.g., tribal peoples) at the periphery of World Civilizations
5. The relationship between the arts, literature, religious traditions, and philosophies and historical events, movements, and trends

Identify, describe, and analyze the major historical trends, movements, people, and events of the selected period(s) of World Civilizations.

Identify, describe, and analyze major artistic, architectural, literary, and philosophical works from various World Civilizations from the Ancient to the Early Modern time periods.

Identify, describe, and analyze the religion traditions from various World Civilizations from the Ancient to the Early Modern time periods.

Compare and contrast historical periods or events from two or more time periods or civilizations.

Compare and contrast artistic, architectural, literary, and/or philosophical works from two or more time periods or civilizations.

Compare and contrast religious traditions across two or more time periods and/or civilizations.

Explain how (selected) works of art, architecture, literature, and/or philosophy relate to the historical events and development of their civilizations and time periods.

Explain how peoples at the periphery of the World civilizations (e.g., tribal peoples) have contributed to the development and/or movement of the arts, architecture, philosophy, literature, and/or religious traditions of the world.

Trace and describe the changes in art, architecture, philosophy, and/or religious traditions as they moved through time and space.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Each instructor will determine the assessment methods for her/his course. Multi-genre/multi-media projects are encouraged by the Humanities department.

General Course Requirements and Recommendations

1. Students should be introduced to at least two major World Civilizations, at least one of them should be a non-Western Civilization, depending on the theme of the class.
2. Students should be introduced to the major disciplines within the Humanities.
3. Some form of written assignment is strongly suggested.
4. A research project focusing on a historical person or event or a work of art, architecture, literature, philosophy, or religious traditions is strongly suggested. This can be the above mentioned assignment.

Texts
Each instructor will select the teaching materials she/he feels are best suited to her/his course.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for HUM 105

HUM204 - Introductio to American Cultural Studies

Overview

Subject
Humanities

Academic Department
Humanities

School
Liberal Arts

Course Description
This course is a basic introduction to the study of America and its culture. The course focuses on the ideals, fears, conflicts and realities of American culture over the past centuries. This course will include a wide number of humanities disciplines (visual arts, music, drama, religion, philosophy, literature, and architecture) to explore these topics. The use of popular academic cultural theories will also be presented. This course will explore dominant cultures as well as subcultures that are prevalent in America and the way these cultures shape who we think we are as a nation.

Course Pre-requisite(s)
Eligible to take ENG courses at HFC.

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
10

Academic Level
Undergraduate

General Education Category
Humanities and Fine Arts

Michigan Transfer Agreement (MTA) Category
Category 5: Humanities and Fine Arts - Applied Degrees, Category 5: Humanities and Fine Arts - Transfer Degrees

Goals, Topics, and Objectives

Course Goals
To increase students' knowledge of American culture and the narratives that we construct to create a national identity, to introduce students to the methods used to study culture in the humanities and give students the skills to apply this knowledge to analyze and understand current events and their own world.

Core Course Topics

1. Cultural theories and the arguments made about how culture is formed
2. The various stories that make up our collective story of American identity and the importance of those narratives on current events
3. Dominant cultures and subcultures of both recent and past incarnations of the U.S. story
4. The inter-related nature of politics, the arts, religion, and culture throughout the life of the U.S.

Explain major terms and concepts of the cultural theories

Identify and appraise dominant and major subcultures of the country

Identify and critically evaluate cultural periods and social movements

Develop an understanding of how ideology shapes the country and influences the society and its relation to current events

Contrast the various subcultures and what these groups offer to the larger narrative of what it means to "be American"

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement

1. Students should have a variety of assessments including written essays, oral presentations, and/or multi-media/multi-genre projects
2. Students will write at least one essay
3. Students will complete a minimum of three methods of assessment

General Course Requirements and Recommendations

1. This course is to be an interdisciplinary study of American culture
2. While an instructor can choose a specific theme(s) to focus upon, there should be an emphasis on using multiple disciplines and various media to explore with students the story of humankind
3. Instructors should consider including the subcultures that are prominent in SE Michigan and the Detroit metro area
4. There should be a mix of both primary and secondary texts

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for HUM 204

HUM251H - Great Works

Overview

Subject
Humanities

Academic Department
Humanities

School
Liberal Arts

Course Description
Introduces seminal works from a range of disciplines, including literature, philosophy, history, religion, anthropology, psychology, and science. Explores each great work in terms of its capacity not only to assess issues crucial to its own era but also in terms of its power to illuminate the parameters of ethical, social, and cultural principles in the modern world.

Course Pre-requisite(s)
ENG131 Introduction College Writing Honors, with a C or better

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
25

Academic Level
Undergraduate

General Education Category
Humanities and Fine Arts

Michigan Transfer Agreement (MTA) Category
Category 5: Humanities and Fine Arts - Applied Degrees, Category 5: Humanities and Fine Arts - Transfer Degrees

Goals, Topics, and Objectives

Course Goals
The Honors Great Works Seminar aims to reveal to students their ability to engage challenging material from multiple disciplines and diverse cultures, and to encourage the continuation of such self-culture for a lifetime.

Core Course Topics

1. Critical textual analysis of great works from throughout time and from all over the world.
2. Relationship of style, genre, history, and culture on a given great work.
3. The interdisciplinary conversation of great ideas that occurs across cultures and time.
4. Oral and written evaluation and synthesis/presentation of ideas and arguments.

Interpret meaning in various texts by paying close attention to the creator's choices of detail, vocabulary, and style.
Discuss the relationship between different genres of texts and the multicultural & interdisciplinary environments from which they spring.
Articulate a critical evaluation and appreciation of a work's strengths and limitations.
Evaluate the commentary of classmates, as well as the remarks of the instructor, within a seminar setting.
Evaluate the contemporary relevance of particular texts.
Write critical essays employing a strong thesis statement, appropriate textual citations, contextual and intertextual evidence for their assertions

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement

1. 1,500 word (minimum) seminar essay
    - is a comparison and contrast of two of the required course readings selected by the instructor.
    - includes both a "summary" and an "analysis" section.
2. An oral final examination in which the instructor engages each student in conversation regarding course texts and themes.

General Course Requirements and Recommendations
This course is to be an interdisciplinary study of great works (defined broadly) over many cultures and times. While an instructor can choose specific themes and particular authors/creators to focus on, there should be an emphasis on using multiple disciplines and various media to explore with students the idea of what makes a work great.

Texts
Instructors should choose from the Honors Council approved list and coordinate their choices with the Honors Director.

ICO190 - Co-op in Industrial Technology

Overview

Subject
Advanced Manufacturing

Academic Department
Adv Manufacturing/Fabrication

School
Business, Entrepreneurshp, PD

Course Description
Cooperative education is a structured method of combining classroom-based education with practical work experience. A cooperative education experience, commonly known as a "co-op," provides academic credit for structured employment experience. Work experience must be directly related to the student's declared major to be eligible.

Course Pre-requisite(s)
Permission from Career Services Officer or Job Developer in the Office of Career Services

Credit Hours
1

Total Contact Hours

Total Instructor Contact Hours:
3

Total Student Contact Hours:
75

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
Student will submit a formal request in writing to the faculty and Associate Dean for work experience to be considered for Credit for Prior College-Level Learning.

The student will complete an interview, a reflective paper, or a presentation to the faculty in which the student develops and describes the learning objectives supported by the work experience, how those learning objectives were achieved and how that learning was put into practice.

Finally, the student must also provide a portfolio (or something comparable) that shows the work completed and provide some form of documentation confirming the work experience (a resume does not suffice) for which Credit for Prior College-Level Learning is requested.

Goals, Topics, and Objectives

Course Goals
Cooperative education helps students make the school-to-work transition, develop career and program-related learning objectives, and work on applicable skills for employment. Placements should provide students with the opportunity to apply and expand upon knowledge learned in the classroom, and develop the skills acquired in their coursework to align with the standards and expectations set by the worksite.

Core Course Topics

1. Professional Dress and Demeanor (attitude, posture, courteousness)
2. Workplace Communication
3. Interviewing Skills
4. Resume Building
5. Networking and Social Media
6. Seeking Employment
7. Career Advancement

1-3 program specific learning objectives will be developed by the instructor for each individual offering.
Students will create 1-3 learning objectives per credit to be approved by instructor for each individual offering.
Build a resume that meets standards of Career Services Officer.
Career Services-defined: Articulate the reasons for professional attire.
Wear professional attire while on the worksite.
Attend career workshop in professional dress.
Display appropriate professional attitude and demeanor while on the worksite.
Interview effectively.
Attend mock interview, give appropriate answers to five 5 questions.
Complete a written job application in a prompt, professional manner with all information legible, error-free, and thorough. -Display solid understanding of the appropriate use of Social Media sites (Facebook, LinkedIn, and Twitter) during Career Services workshop.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment will be determined by the instructor based on what is in the best interest of the student's academic growth, including future employability of the student. Assessment may include, but isn't limited to:
Major final project Weekly journal
Creation and attainment of all learning objectives Participation in a career-focused workshop Consistent and prompt attendance at worksite
Employer evaluation

General Course Requirements and Recommendations
To be determined by the instructor. Detailed course syllabi will be standardized for all co-op courses and individual course requirements will be available to the Area Council and College Council by request "For information only" for each term that the course is offered.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for ICO 190

ICO290 - Co-op in Industrial Technology

Overview

Subject
Advanced Manufacturing

Academic Department
Adv Manufacturing/Fabrication

School
Business, Entrepreneurshp, PD

Course Description
Cooperative education is a structured method of combining classroom-based education with practical work experience. A cooperative education experience, commonly known as a "co-op," provides academic credit for structured employment experience. Work experience must be directly related to the student's declared major to be eligible.To register for this course, a student must have completed 50% of core coursework, maintain an overall GPA of 2.0 and a program specific GPA of 2.5.

Course Pre-requisite(s)
Permission from Career Services Officer or Job Developer in the Office of Career Services

Credit Hours
2

Total Contact Hours

Total Instructor Contact Hours:
3

Total Student Contact Hours:
150

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
Student will submit a formal request in writing to the faculty and Associate Dean for work experience to be considered for Credit for Prior College-Level Learning.

The student will complete an interview, a reflective paper, or a presentation to the faculty in which the student develops and describes the learning objectives supported by the work experience, how those learning objectives were achieved and how that learning was put into practice.

Finally, the student must also provide a portfolio (or something comparable) that shows the work completed and provide some form of documentation confirming the work experience (a resume does not suffice) for which Credit for Prior College-Level Learning is requested.

Goals, Topics, and Objectives

Course Goals
Cooperative education helps students make the school-to-work transition, develop career and program-related learning objectives, and work on applicable skills for employment. Placements should provide students with the opportunity to apply and expand upon knowledge learned in the classroom, and develop the skills acquired in their coursework to align with the standards and expectations set by the worksite.

Core Course Topics

1. Core Career-Focused Topics:

   A. Professional Dress and Demeanor (attitude, posture, courteousness)
   B. Workplace Communication
   C. Interviewing Skills
   D. Resume Building
   E. Networking and Social Media
   F. Seeking Employment
   G. Career Advancement

1-3 program specific learning objectives will be developed by the instructor for each individual offering.
Students will create 1-3 learning objectives per credit to be approved by instructor for each individual offering.
Build a resume that meets standards of Career Services Officer.
Articulate the reasons for professional attire.
Wear professional attire while on the worksite.
Attend career workshop in professional dress.
Display appropriate professional attitude and demeanor while on the worksite.
Interview effectively
Attend mock interview, give appropriate answers to five 5 questions
Career Services-defined: Complete a written job application in a prompt, professional manner with all information legible, error-free, and thorough.
Display understanding of the appropriate use of Social Media sites (Facebook, LinkedIn, and Twitter) during Career Services workshop.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment will be determined by the instructor based on what is in the best interest of the student's academic growth, including future employability of the student. Assessment may include, but isn't limited to:
• Major final project
• Weekly journal
• Creation and attainment of all learning objectives
• Participation in a career-focused workshop
• Consistent and prompt attendance at worksite
• Employer evaluation
- Portfolio
- Interview.

General Course Requirements and Recommendations
To be determined by the instructor. Detailed course syllabi will be standardized for all co-op courses and individual course requirements will be available to the AEC and College Council by request "For information only" for each term that the course is offered.

Texts
None

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for ICO 290

INTR181 - Principles of Design

Overview

Subject
Interior Design

Academic Department
Building Sciences

School
Business, Entrepreneurshp, PD

Course Description
An introduction to the principles and elements of design that provide the foundation for aesthetic concepts in the interior design profession. Development of professional visual presentation techniques through the creation of interior design boards and models. Introduction to the design process and aesthetic conceptualization techniques.

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
20

Academic Level
Undergraduate

General Education Category
Humanities and Fine Arts

Michigan Transfer Agreement (MTA) Category
Category 5: Humanities and Fine Arts - Applied Degrees, Category 5: Humanities and Fine Arts - Transfer Degrees

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
Determined by department.

Goals, Topics, and Objectives

Course Goals
To introduce students to design principles and elements as they relate to interiors. The course will also instruct students in the design process and techniques used in creating and presenting aesthetic concepts. Students will acquire technical and artistic skills necessary to produce quality presentation boards and models.

Core Course Topics

1. Interior design profession and career options.
2. Design vocabulary; written aesthetic concept statements and professional presentations
3. Principles and elements of design as they relate to interiors
4. Examination of acclaimed interior designers, architects and their work for the enhancement and development of students' personal style, sophistication and creativity.
5. Eight-step design process
6. Visual presentation techniques
7. Interiors sample boards, quality craftsmanship and proficiency in graphic presentation.
8. Scaled models of residential structures.

Identify various career options, educational requirements, certifications, licensing, organizations and associations for interior design professionals.

Employ strong design vocabulary and communication skills as they pertain to interiors, including presentation outlines and concept statements in written, oral and visual presentations.

Assess and critique photographs of residential and commercial interiors in professional design magazines or in digital format, identifying the elements and principles of design used by the interior designer or architect.

Exhibit an enhanced level of personal style, sophistication and creativity developed through critiques of a broad range of interior environments.

Define the eight phases of the interior design process.

Demonstrate an ability to create innovative, professional quality presentation boards conveying aesthetic concepts.

Employ craftsmanship and professional graphic composition in the construction of presentation boards.

Construct a scaled model residential structure.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement

- Mid-Term and Final Exams
- Exercises and Assignments
- Concept and presentation boards
- Model building

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for INTR 181

INTR294 - Kitchen and Bath Internship

Overview

Subject
Interior Design

Academic Department
Building Sciences

School
Business, Entrepreneurshp, PD

Course Description
Offers practical work experience within the student's program of study through an internship in the kitchen and bath industry. Must have completed most of the coursework in the Kitchen and Bath Design program before applying for an internship and this course.

Course Pre-requisite(s)
INTR-250 or INTR-251 or instructor approval

Credit Hours
2

Total Contact Hours

Total Instructor Contact Hours:
32

Total Student Contact Hours:
32

Course Fee
10

Academic Level
Undergraduate

Goals, Topics, and Objectives

Course Goals
This course will offer students an opportunity to employ all aspects of technical information and skills acquired in Kitchen and Bath studio courses to a practical, supervised work environment in the kitchen and bath industry. Students desiring to take the Associate Kitchen and Bath Designer certification exam will need to fulfill this internship under the guidance of a Certified Kitchen or Bath Designer approved by an INTR advisor. To monitor student compliance and substantive progress, periodic meetings on campus with instructor are required.

Core Course Topics

1. Standard business practices in the kitchen and bath industry.
2. Professional services offered by kitchen and bath designers.
3. Pricing, profit margins, mark-up and record keeping.
4. Apply kitchen and bath interior design skills in the workplace environment.
5. Good customer service.

Develop an understanding of the business practices in the kitchen and bath industry.

Recognize and identify professional services offered in kitchen and bath design.

Assess and appraise standard pricing, profit margins, mark-up and record keeping used in the kitchen and bath industry.

Employ good customer service and evaluate its impact on business/ client relationships in the kitchen and bath industry.

Employ professional oral and written communication and presentation skills.

Illustrate in-depth knowledge and understanding of project ordering, scheduling, subcontracting, installation, and supervision of kitchen and bath projects.

Select kitchen and bath cabinetry, develop specifications using industry nomenclature.

Apply skills obtained from practical, hands-on kitchen and bath interior design experience.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement

1. Actively participate in discussions with faculty.
2. Participate in approved Internship in Kitchen/Bath industry.
3. Document evidence of all work performed during internship.
4. Provide written evaluation from employing supervisor.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for INTR 294

ITAL131 - Elementary Italian I

Overview

Subject
Language Studies

Academic Department
Language Studies

School
Liberal Arts

Course Description
Introduces the basic skills of reading, writing, speaking, and listening skills in Italia within communicative contexts. Covers the elementary pronunciation and grammatical principles necessary for comprehending and expressing simple ideas in both spoken and written Italian. Presents Italian culture.

Course Pre-requisite(s)
ENG094 ALP: Reading and Writing/ENG095E ALP for ELL:Reading & Writing eligible or instructor permission

Credit Hours
4

Total Contact Hours
Total Instructor Contact Hours:
62

Total Student Contact Hours:
62

Course Fee
10

Academic Level
Undergraduate

General Education Category
Humanities and Fine Arts

Michigan Transfer Agreement (MTA) Category
Category 5: Humanities and Fine Arts - Applied Degrees, Category 5: Humanities and Fine Arts - Transfer Degrees

Goals, Topics, and Objectives

Course Goals
ITAL131 Elementary Italian I is designed to enable students to reach the Novice Mid-level on the American Council on the Teaching of Foreign Languages (ACTFL) proficiency scale, focusing on language learning through communication, cultures, connections, comparisons, and communities. Presents Italian culture.

Core Course Topics
1. Greetings, introductions, and farewells
2. Phonetics
3. Alphabet
4. Numbers
5. Present-tense verbs
6. Past-tense verbs
7. Gender and number agreement
8. Prepositions
9. Affirmation and negation
10. Interrogatives
11. Vocabulary
12. Italian culture

Use appropriate greetings, introductions, and farewells
Demonstrate knowledge of phonetics through the comprehensible pronunciation of Italian words
Demonstrate verbal and written knowledge of the Italian alphabet
Recognize and produce numbers, dates, and times
Demonstrate correct usage of present-tense indicative verb forms, including regulars, irregulars, and conoscere and sapere
Recognize and produce the passato prossimo tense with avere
Demonstrate knowledge of singular/plural, case, and gender agreement for nouns, pronouns, and adjectives
Recognize and use selected prepositions orally and in writing
Create simple affirmative and negative statements using appropriate word order
Develop and respond to interrogative questions relating to chapter/unit themes using appropriate word order
Write about, speak about, and interpret situations similar to those presented in each chapter/unit of the textbook
Compare and contrast elements of Italian culture that differ from the U.S. norm

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of academic achievement will be identified and implemented by the class instructor. Methods will include, but not be limited to:

- Participation
- Weekly/regular quizzes
- Homework assignments
- Chapter/unit tests
- Oral and/or expressive-receptive exam(s)
- Departmental writing assessment
- Midterm/final exam

General Course Requirements and Recommendations
Note: A grade of C- is not transferable and is not accepted by some programs at HFC.

Texts
All sections of this level will use a textbook (and any accompanying materials) selected by the course coordinator and approved by the World Languages Committee.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for ITAL 131

ITAL132 - Elementary Italian II

Overview

Subject
Language Studies

Academic Department
Language Studies

School
Liberal Arts

Course Description
Further builds reading, writing, speaking, and listening skills in Italian, focusing on communication in a cultural context. Develops knowledge of vocabulary, pronunciation and grammatical principles in order to comprehend and express everyday ideas in both spoken and written Italian. Presents Italian culture.

Course Pre-requisite(s)
A grade of C or better in ITAL131 Elementary Italian I or in one year of high school Italian, or instructor permission

Credit Hours
4

Total Contact Hours
Total Instructor Contact Hours:
62

Total Student Contact Hours:
62

Course Fee
10

Academic Level
Undergraduate

General Education Category
Humanities and Fine Arts

Michigan Transfer Agreement (MTA) Category
Category 5: Humanities and Fine Arts - Applied Degrees, Category 5: Humanities and Fine Arts - Transfer Degrees

Goals, Topics, and Objectives

Course Goals
ITAL132 Elementary Italian II is designed to enable students to reach the Novice High level on the American Council on the Teaching of Foreign Languages (ACTFL) proficiency scale, focusing on language learning through communication, cultures, connections, comparisons, and communities.

Core Course Topics
1. Present-tense verbs
2. Past-tense verbs
3. Hypothetical expressions
4. Reciprocity
5. Perfect verb forms
6. Future
7. Commands
8. Prepositions
9. Pronouns
10. Comparative and superlative structures
11. Narration
12. Italian culture

Demonstrate correct usage of present-tense reflexive verbs
Recognize, produce, and compare the passato prossimo tense with avere and essere and the imperfetto tense
Recognize and produce the conditional present and conditional past verb forms, including regulars and irregulars
Express reciprocity correctly both orally and in writing
Demonstrate correct usage of the trapassato prossimo tense
Recognize and produce the futuro semplice verb forms, including regulars and irregulars
Recognize and produce simple formal and informal commands
Recognize and use selected prepositions orally and in writing
Interpret and demonstrate correct usage of direct and indirect object pronouns
Compare and contrast using appropriate comparative and superlative structures
Interpret and produce simple narratives in the past using appropriate time markers and present and past verb forms
Analyze aspects of Italian culture that differ from the U.S. norm, giving specific examples that illustrate such differences

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of academic achievement will be identified and implemented by the class instructor. Methods will include, but not be limited to:

- Participation
- Weekly/regular quizzes
- Homework assignments
- Chapter/unit tests
- Oral and/or expressive-receptive exam(s)
- Midterm/final exam

General Course Requirements and Recommendations
Note: A grade of C- is not transferable and is not accepted by some programs at HFC.

Texts
All sections of this level will use a textbook (and any accompanying materials) selected by the course coordinator and approved by the World Languages Committee.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for ITAL 132

JOUR131 - News Writing

Overview

Subject
Journalism

Academic Department
Media Communication Arts

School
Liberal Arts

Course Description
Introduces news writing in its various forms such as news stories, thought-provoking opinions, and stimulating reviews. Examines the gathering, processing and writing of news and information on current matters using professional standards in both print and online news production. Analysis of current and historical case studies that illustrate demographic, social, and ethical aspects of journalism. Creative problem-solving strategies are encouraged throughout the course and culminate with the writing of a feature story in both print and online formats.

Course Pre-requisite(s)
Eligible to take ENG courses at HFC.

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
10

Academic Level
Undergraduate

General Education Category
Humanities and Fine Arts

Michigan Transfer Agreement (MTA) Category
Category 5: Humanities and Fine Arts - Applied Degrees, Category 5: Humanities and Fine Arts - Transfer Degrees

Goals, Topics, and Objectives

Course Goals
Students will gain an understanding of how to critically analyze writing of news, features, sports, opinions, editorials, and reviews using standards for both print and online news production. Students will gain critical insights about journalism standards for news production in the digital age. Students will learn to:

1. Analyze the role of the news media in American society.
1. Analyze news stories, feature stories, opinions and reviews for a balanced perspective of information.
1. Identify and evaluate accuracy and relevance of information in both print and online formats through critically written analyses.
1. Collect facts and quotations necessary for accurate and balanced news writing.
1. Integrate necessary information from a variety of sources into logical, organized, and clearly written news stories, opinions, reviews, and features.
1. Write and edit a news story so that it is concise, neutral, accurate and balanced.
1. Organize facts and properly attribute sources per journalism standards.
1. Edit stories per Associated Press style guidelines.
1. Edit writing to eliminate errors such as comma splices, run-ons, and fragments.
1. Write in both print and online formats.

Core Course Topics

1. History of Journalism
2. Journalism standards for gathering and reporting news
3. Associated Press Stylebook guidelines for news writing
4. Bias and accuracy in news writing
5. Journalism and technology
6. Journalism ethics in the digital age
7. Analyze the role of news media in American society
8. Write a feature story using journalism standards
9. Write in both print and online mediums
10. Compare and contrast public relations writing and news writing

Identify the main ideas and the main supporting details of news and feature stories.
Analyze the standard organizational structure of news stories, feature stories, opinions and reviews.
Analyze how professional writers use quotations and information from a variety of sources to write a balanced and accurate news story.
Evaluate bias and accuracy in sources.
Evaluate the effectiveness of various forms of writing news.
Examine ethical practices both current and historical in writing news for target audiences.
Write a feature story for both print and online mediums.
Compare and contrast public relations writing and news writing standards.
Compose written reports.
Integrate research material from different sources into a logically and clearly written document.
Identify and evaluate bias and credibility in print and online news production through written critical analyses.
Analyze current issues in writing for news in print and online.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement

1. Students will write a minimum of five writing assignments (not including the final exam).
2. News writing assignments will occur at regular intervals, and will increase in depth of reporting and use of information technology.
3. Quizzes on readings will occur at regular intervals leading to a cumulative final exam.
4. At least one news writing assignment must be submitted to the Mirror News per the student newspaper's submission guidelines.
5. One online, social media, or multimedia project.
6. One presentation or proposal pitching feature story to the class.
7. Written feature story that uses journalism standards for both print and online news production.
8. Written plan for media convergence of online and social media to complement and promote the feature story.
9. Student will create and conduct survey of class for audience response to feature story.
10. Final examination. Instructors have the option of selecting other forms of student achievement.

General Course Requirements and Recommendations
Note that a grade of C- (C minus) is not transferrable and is not accepted by some programs at HFC.

Texts
The curricular committee that oversees this course maintains a list of approved texts.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for JOUR 131

JOUR292 - Journalism Experience-Online News Writin

Overview

Subject
Journalism

Academic Department
Media Communication Arts

School
Liberal Arts

Course Description
This Journalism learning experience is for students interested in writing for an online news publication. The experience will be under the direction of the faculty advisor for the Mirror News.

Course Pre-requisite(s)
Instructor permission

Credit Hours
1

Total Contact Hours

Total Instructor Contact Hours:
16

Total Student Contact Hours:
16

Academic Level
Undergraduate

Goals, Topics, and Objectives

Course Goals
Students will:

- Create online news content
- Practice professional journalism standards
- Comply with Associated Press style and ethical guidelines
- Develop academic responsibility and critical thinking skills in the field of journalism
- Develop comprehension and practice of ethics in journalism
- Develop the skills and talents needed to pursue a career in journalism or a journalism-related field

Core Course Topics

1. News writing standards
2. Identifying and analyzing sources
3. Assessing audience response
4. Evaluating bias and ethics in reporting
5. Associated Press style guidelines
6. Journalism standards with photos and captions
7. Journalism standards with audio and video content
8. Proposing story ideas and setting timeline for story completion
9. Editing and proofreading
10. Publishing content online

Apply journalism standards for news writing

Identify and analyze sources

Compare and contrast audience responses

Assess bias and ethics in reporting

Comply with Associated Press style guidelines

Practice journalism standards with photos and captions

Practice journalism standards with audio and video content

Propose story ideas and set a timeline for story completion

Edit and proofread for grammar, punctuation, and spelling

Design news story for online publication

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of academic achievement may include, but not be limited to, weekly activity review meetings and online published content critiques.

General Course Requirements and Recommendations
This learning opportunity will provide students interested in careers in Journalism to obtain hands-on experience with producing online content. The student will be required to attend weekly meetings with the faculty adviser for the Mirror News. This opportunity provides students journalism experience beyond that generally available in the classroom. The experiential learning goals are: to encourage academic responsibility and critical thinking in the field of journalism, to develop the student's comprehension and practice of ethics in journalism, and to develop the student's skills and talents in pursuing a career in journalism or a journalism-related field.

Texts
Associated Press Stylebook (online edition)

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for JOUR 292

LGL100 - Essential Paralegal Skills

Overview

Subject
Paralegal

Academic Department
Business & Economics

School
Business, Entrepreneurshp, PD

Course Description
Explores on-the-job realities of the paralegal profession with emphasis on the daily operations of a law office and the role of the paralegal in the office. Covers time management, billing, writing appropriate legal communiques, and communicating with clients.

Course Pre-requisite(s)
ENG131 Introduction College Writing eligible or Instructor permission

Credit Hours
2

Total Contact Hours

Total Instructor Contact Hours:
32

Total Student Contact Hours:
32

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Structure of the Judicial and Legislative Systems
2. Legal terminology
3. Role of the paralegal in the delivery of legal services
4. Organization and time management
5. Verbal communication
6. Written communication
7. Investigating and Interviewing
8. Legal Operations

Describe the structure of the judicial and legislative systems.

Use legal terminology appropriately.

Explain the role of the paralegal in the delivery of legal services.

Identify basic paralegal duties in a law office setting.

Demonstrate effective organizational skills appropriate to a legal setting.

Demonstrate best practices for timekeeping, billing, time management, legal communications, and law office management.

Explain effective verbal communication skills appropriate to a legal setting.

Prepare appropriate and grammatically correct letters, releases, subpoenas, Freedom of Information Act (FOIA) requests, and interoffice memoranda.

Analyze real or hypothetical scenarios, and use appropriate interview and investigative techniques to uncover facts necessary to support a legal position.

Gain an understanding of current legal software programs used in the legal profession, such as GenAI, Contract Lifecycle Management systems, eSignature, and records management systems.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Students will be assessed through quizzes, tests, in-class and out-of-class assignments, drafting assignments, and/or class participation.

Grading Scale

LETTER GRADE	PERCENTAGE
A	93-100%
A-	90-92.9%
B+	87% - 89.9%
B	83% - 86.9%
B-	80% - 82.9%
C+	77% - 79.9%
C	73% - 76.9%
C-	70% - 72.9%
D+	67% - 69.9%
D	63% - 66.9%
D-	60% - 62.9%
E	<60%

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for LGL 100

LGL110 - Legal Ethics

Overview

Subject
Paralegal

Academic Department
Business & Economics

School
Business, Entrepreneurshp, PD

Course Description
Presents the laws and regulations of paralegals, attorneys, and non-attorney employees in the legal industry while emphasizing professional and ethical responsibilities. Examines portions of the Michigan Rules of Professional Conduct and focuses on the unauthorized practice of law, client confidentiality, conflicts of interest, advertising and solicitation, and the handling of client funds.

Course Pre-requisite(s)
ENG131 Introduction College Writing Eligible or Instructor permission

Credit Hours
2

Total Contact Hours
Total Instructor Contact Hours:
32

Total Student Contact Hours:
32

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Professional Legal and Paralegal Organizations
2. Legal Ethics and Professional Responsibility
3. Consequences of Ethical Misconduct
4. Continuing Legal Education for Paralegals

Explain the role of professional organizations such as the ABA and NALA in regulating and certifying paralegals.

Describe the ethical rules and regulations for paralegals and other non-attorney employees in the legal industry.

Identify what constitutes the unauthorized practice of law.

Explain the legal rules of client confidentiality.

Describe the legal rules of conflicts of interest.

Explain the limits of advertising and solicitation in the legal industry.

Explain the process of managing client funds.

Explain the limits for using or accessing clients' social media accounts.

Identify and resolve ethical dilemmas that paralegals may confront in the workplace

Identify the consequences of ethical misconduct.

Explain the importance of continuing legal education for paralegals.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Students will be assessed through quizzes, tests, in-class and out-of-class assignments, drafting assignments, and/or class participation.

Grading Scale

LETTER GRADE	PERCENTAGE
A	93-100%
A-	90-92.9%
B+	87% - 89.9%
B	83% - 86.9%
B-	80% - 82.9%
C+	77% - 79.9%
C	73% - 76.9%
C-	70% - 72.9%
D+	67% - 69.9%
D	63% - 66.9%
D-	60% - 62.9%
E	<60%

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for LGL 110

LGL115 - Property Law

Overview

Subject
Paralegal

Academic Department
Business & Economics

School
Business, Entrepreneurshp, PD

Course Description
Explores different types of real property ownership and the rights and liabilities associated with each type. Examines the anatomy of a real estate closing, real property leases, and the laws surrounding foreclosure and eviction. Covers the drafting of documents relevant to both the acquisition and loss of real property.

Course Pre-requisite(s)
ENG131 Introduction College Writing with a C grade or better, or Instructor permission

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Real Property
2. Easements and Licenses
3. Landlord-tenant Law
4. Drafting

Differentiate the types of real property ownership.

Differentiate the rights and liabilities associated with each type of real property ownership.

Discuss the substantive and procedural laws of financing and acquiring real property.

Describe a real estate closing.

Discuss the substantive and procedural laws of default and foreclosure.

Explain the laws of easements and licenses.

Explain the rights, duties, and liabilities of landlords and tenants.

Discuss the substantive and procedural laws of eviction.

Draft one or more documents related to real estate acquisition or lease.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Students will be assessed through quizzes, tests, in-class and out-of-class assignments, drafting assignments, and/or class participation.

Grading Scale

LETTER GRADE	PERCENTAGE
A	93-100%
A-	90-92.9%
B+	87% - 89.9%
B	83% - 86.9%
B-	80% - 82.9%
C+	77% - 79.9%
C	73% - 76.9%
C-	70% - 72.9%
D+	67% - 69.9%
D	63% - 66.9%
D-	60% - 62.9%
E	<60%

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for LGL 115

LGL126 - Legal Research

Overview

Subject
Paralegal

Academic Department
Business & Economics

School
Business, Entrepreneurshp, PD

Course Description
Examines the structure of the court systems and sources of law in the context of conducting legal research; covers how to locate and understand statutory, regulatory, and common law; examines how to identify real or hypothetical legal issues and then develop a research plan. Covers how to perform legal research using Westlaw and other Internet-based research databases.

Course Pre-requisite(s)
ENG131 Introduction College Writing with a C grade or better, or Instructor permission

Credit Hours
4

Total Contact Hours
Total Instructor Contact Hours:
62

Total Student Contact Hours:
62

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Sources of Law
2. Research
3. Memoranda of Law

Identify sources of law in the context of legal research.
Distinguish between mandatory and persuasive authorities.
Identfiy legal issues from real or hypothetical scenarios.
Develop strategies and generate search terms for researching complex legal issues.
Create appropriate and cost-effective research plan.
Perform legal research using computer-assisted research tools.
Brief legal cases, properly identifying all relevant parts.
Properly validate and cite findings.
Draft a research memorandum incorporating sound research and analytical techniques, proper legal citation, proper grammar, and formatting.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Students will be assessed through:

- Quizzes
- Tests
- In-class and out-of-class assignments
- Drafting assignments
- And/or class participation.

Grading Scale

LETTER GRADE	PERCENTAGE
A	93-100%
A-	90-92.9%
B+	87% - 89.9%
B	83% - 86.9%
B-	80% - 82.9%
C+	77% - 79.9%
C	73% - 76.9%
C-	70% - 72.9%
D+	67% - 69.9%
D	63% - 66.9%
D-	60% - 62.9%
E	<60%

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for LGL 126

LGL190 - Co-Op in Paralegal Studies

Overview

Subject
Paralegal

Academic Department
Business & Economics

School
Business, Entrepreneurshp, PD

Course Description
Cooperative education is a structured method of combining classroom-based education with practical work experience. A cooperative education experience, commonly known as a "co-op," provides academic credit for structured employment experience. Work experience must be directly related to the student's declared major to be eligible.To register for this course, a student must have completed 50% of core coursework, maintain an overall GPA of 2.0 and a program specific GPA of 2.5.

Course Pre-requisite(s)
Permission from Career Services Officer or Cooperative Education Officer

Credit Hours
1

Total Contact Hours

Total Instructor Contact Hours:
3

Total Student Contact Hours:
75

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
Student will submit a formal request in writing to the faculty and Associate Dean for work experience to be considered for Credit for Prior College-Level Learning.

The student will complete an interview, a reflective paper, or a presentation to the faculty in which the student develops and describes the learning objectives supported by the work experience, how those learning objectives were achieved and how that learning was put into practice.

Finally, the student must also provide a portfolio (or something comparable) that shows the work completed and provide some form of documentation confirming the work experience (a resume does not suffice) for which Credit for Prior College-Level Learning is requested.

Goals, Topics, and Objectives

Course Goals
Cooperative education helps students make the school-to-work transition, develop career and program-related learning objectives, and work on applicable skills for employment. Placements should provide students with the opportunity to apply and expand upon knowledge learned in the classroom, and develop the skills acquired in their coursework to align with the standards and expectations set by the worksite.

Core Course Topics

1. Professional Dress and Demeanor (attitude, posture, courteousness)
2. Workplace Communication
3. Interviewing Skills
4. Resume Building
5. Networking and Social Media
6. Seeking Employment
7. Career Advancement

Apply classroom knowledge to "real-world" situations by experiencing meaningful legal work in a professional legal setting.

Demonstrate effective, professional-level oral and written communication skills by interacting with supervisors, co-workers, clients, and professionals outside of the co-op office

Apply ethical and professional work standards relating to client confidentiality, conflicts of interest, and the unauthorized practice of law.

Apply problem-solving and decision-making skills to work-related tasks and assignments

Develop a portfolio of sample documents drafted on the job (while protecting client confidentiality).

Maintain a Daily Log or Co-op Journal of work performed, including a summary of hours worked using standard billing practices, and a statement analyzing or applying legal concepts to work performed.

Prepare a Final Report summarizing the work performed and explaining how personal learning goals were or were not satisfied.

Students will create 1-3 learning objectives per credit to be approved by instructor for each individual offering.

Build a resume that meets standards of Career Services Officer.

Articulate the reasons for professional attire.

Wear professional attire while on the worksite.

Attend career workshop in professional dress.

Display appropriate professional attitude and demeanor while on the worksite.

Interview effectively.

Attend mock interview, give appropriate answers to five 5 questions

Complete a written job application in a prompt, professional manner with all information legible, error-free, and thorough.

Display understanding of the appropriate use of Social Media sites (Facebook, LinkedIn, and Twitter) during Career Services workshop.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment will be determined by the instructor based on what is in the best interest of the student's academic growth, including future employability of the student. Assessment may include, but isn't limited to:

- Major final project
- Weekly journal
- Creation and attainment of all learning objectives
- Participation in a career-focused workshop
- Consistent and prompt attendance at worksite
- Employer evaluation

General Course Requirements and Recommendations
To be determined by the instructor. Detailed course syllabi will be standardized for all co-op courses and individual course requirements will be available to the AEC and College Council by request "For information only" for each term that the course is offered.

Texts
See Division for list of required texts

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for LGL 190

LGL200 - Civil Litigation

Overview

Subject
Paralegal

Academic Department
Business & Economics

School
Business, Entrepreneurshp, PD

Course Description
Examines civil trials, beginning with a review of the pleadings that initiate a civil law suit and concluding with the trial. Covers pre-trial practice, pre-trial motions, trial preparation, and offers a mock-trial experience. Also explores Alternative Dispute Resolution (ADR), post-trial motions, and appeals.

Course Pre-requisite(s)
ENG131 Introduction College Writing and PLGL126 both with a C grade or better, or Instructor Permission

Credit Hours
4

Total Contact Hours

Total Instructor Contact Hours:
62

Total Student Contact Hours:
62

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Overview of Civil Litigation & Civil Procedure
2. Initiating Litigation and Pretrial Proceedings
3. Discovery
4. Trial
5. Trial

Identify and introduce the parties, pleadings, and stages of litigation
Discuss the role of the litigation paralegal.
Discuss Courts and Jurisdiction
Explain the process for initiating litigation and responding to the complaint.
Draft a complaint, an answer, or other pleading commonly used in litigation.
Discuss motion practice: Identify relevant Michigan court rules and corresponding case law.
Overview of the discovery process.
Discuss discover available techniques.
Demonstrate ability to draft a pleading related to discovery.
Identify relevant Michigan court rules and corresponding case law.
Explain the stages of a trial.
Discuss the substantive and procedural Michigan court rules of trial and post-trial motions.
Participate in a litigation simulation.
Explain the stages of a trial.
Participate in a mock trial.
Discuss the substantive and procedural rules of trial and post-trial motions.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Students will be assessed through quizzes, tests, in-class and out-of-class assignments, drafting assignments, and/or class participation.

Grading Scale

LETTER GRADE	PERCENTAGE
A	93-100%
A-	90-92.9%
B+	87% - 89.9%
B	83% - 86.9%
B-	80% - 82.9%
C+	77% - 79.9%
C	73% - 76.9%
C-	70% - 72.9%
D+	67% - 69.9%
D	63% - 66.9%
D-	60% - 62.9%
E	<60%

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for LGL 200

LGL220 - Personal Injury Litigation

Overview

Subject
Paralegal

Academic Department
Business & Economics

School
Business, Entrepreneurshp, PD

Course Description
Explores civil litigation in the context of a personal injury or product liability action. Introduces the substantive laws of negligence, intentional tort, personal-injury, and product liability.

Course Pre-requisite(s)
ENG131 Introduction College Writing with a C grade or better, or Instructor permission

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Negligence
2. Strict Liability
3. Intentional Torts
4. Product Liability
5. Warranties
6. Drafting

Discuss the substantive laws of negligence.

Discuss the substantive laws of strict liability.

Discuss the substantive laws of intentional torts.

Discuss the substantive laws of product liability.

Discuss the substantive laws of warranties.

Create and draft pleadings in support of a real or hypothetical personal injury case.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Students will be assessed through quizzes, tests, in-class and out-of-class assignments, drafting assignments, and/or class participation.

Grading Scale

LETTER GRADE	PERCENTAGE
A	93-100%
A-	90-92.9%
B+	87% - 89.9%
B	83% - 86.9%
B-	80% - 82.9%
C+	77% - 79.9%
C	73% - 76.9%
C-	70% - 72.9%
D+	67% - 69.9%
D	63% - 66.9%
D-	60% - 62.9%
E	<60%

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for LGL 220

LGL226 - Legal Writing

Overview

Subject
Paralegal

Academic Department
Business & Economics

School
Business, Entrepreneurshp, PD

Course Description
Explores how to identify legal issues and perform advanced-level research using Westlaw and other Internet-based research databases. Covers application of the law to a hypothetical fact scenarios and presenting results in an objective memorandum, persuasive brief, or oral argument, using appropriate legal terminology and citation.

Course Pre-requisite(s)
ENG131 Introduction College Writing and PLGL126 both with a C grade or better, or Instructor Permission

Credit Hours
4

Total Contact Hours

Total Instructor Contact Hours:
62

Total Student Contact Hours:
62

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Identify of Legal Issues
2. Legal Research and Analysis
3. Objective Memoranda
4. Opinion Letter
5. Persuasive Brief or Argument
6. Ethics

Identify and analyze complex legal issues from real and hypothetical fact scenarios.

Develop strategies and conduct advanced legal research using computer-assisted research tools.

Synthesize and apply multiple sources of law relevant to a complex real or hypothetical fact scenario.

Draft objective memoranda analyzing and applying the law to a real or hypothetical scenario involving multiple legal issues, and presenting a legally supported conclusion.

Properly validate and cite findings.

Analyze and apply the law to a real or hypothetical scenario.

Draft legal opinions to a hypothetical client with a legally supported conclusion and recommendation.

Draft persuasive brief or present persuasive argument after analyzing and applying the law to a real or hypothetical scenario involving multiple legal issues.

Properly validate and cite findings.

Evaluate the ethical considerations of the paralegal in the legal research and writing process.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Students will be assessed through quizzes, tests, in-class and out-of-class assignments, drafting assignments, and/or class participation.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for LGL 226

LGL228 - Technology in the Law

Overview

Subject
Paralegal

Academic Department
Business & Economics

School
Business, Entrepreneurshp, PD

Course Description
Introduces students to the fundamentals of how to use computer technology to accomplish tasks performed by paralegals in a law office. Examines software applications involving document creation, assembly, and management. Students will also examine litigation support, case management software, electronic discovery, and presentation tools used in today's courtrooms. This course addresses ethical considerations in the use of computer technology in the law.

Course Pre-requisite(s)
CIS100 Intro Info Tech with a C grade or better and ENG131 Introduction College Writing eligible, or Instructor Permission

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Documents, Spreadsheets, and Presentations
2. Time Keeping and Billing
3. Security
4. Case Management
5. Electronic Discovery
6. Litigation Support

Demonstrate an ability to draft, edit, and print legal documents by using a word processor and document assembly software.

Demonstrate an ability to develop, edit, and print spreadsheets used in the legal environment.

Demonstrate an ability to design, edit, and execute effective presentations of the type used in the legal profession.

Demonstrate an ability to use timekeeping and billing software.

Demonstrate an understanding of security and confidentiality issues related to electronic transmission of documents/information

Demonstrate an ability to use case management and docket control programs to manage and control a legal organization's cases and the tasks to be completed and scheduled.

Describe the substantive and procedural laws related to electronic discovery.

Explain how to provide litigation support, including how to build litigation support databases, and strategies for searching and extracting information from databases.

Describe how to work effectively in an automated courtroom.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Quizzes, tests, in-class and out-of-class assignments, drafting assignments, and/or class participation.

Grading Scale

LETTER GRADE	PERCENTAGE
A	93-100%
A-	90-92.9%
B+	87% - 89.9%
B	83% - 86.9%
B-	80% - 82.9%
C+	77% - 79.9%
C	73% - 76.9%
C-	70% - 72.9%
D+	67% - 69.9%
D	63% - 66.9%
D-	60% - 62.9%
E	<60%

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for LGL 228

LGL235 - Contracts

Overview

Subject
Paralegal

Academic Department
Business & Economics

School
Business, Entrepreneurshp, PD

Course Description
Explores the fundamental principles of contract law. Covers the elements of contract formation and breach under common law and Article II of the Uniform Commercial Code (UCC). Presents fundamentals of contract drafting. Discusses the laws of secured transactions under Article IX of the UCC, Bankruptcy Laws, and the laws and practices of collecting debt upon default.

Course Pre-requisite(s)
ENG131 Introduction College Writing with a C grade or better, or Instructor permission

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Contracts under Common Law
2. Article II of the Uniform Commercial Code
3. Article III of the Uniform Commercial Code
4. Article IX of the Uniform Commercial Code
5. Debtor-Creditor Rights

Review the elements of contract formation under common law.
Review performance and discharge of contracts under common law.
Review breach of contract, and remedies for breach of contract, under common law.
Describe the elements of contract formation under Article II of the Uniform Commercial Code.
Article II of the Uniform Commercial Code: Explain performance and discharge of contracts under Article II of the Uniform Commercial Code.
Describe the law of warranties under Article II of the Uniform Commercial Code.
Discuss the substantive and procedural laws of breach of contract and remedies for breach under Article II of the Uniform Commercial Code.
Discuss the different types of negotiable instruments.
Explain the purpose of a security agreement.
Discuss the content of a security agreement.
Discuss the substantive and procedural laws of debtor-creditor rights under common law.
Draft a demand letter, garnishment, or other document of pleading used to collect debts.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Students will be assessed through quizzes, tests, in-class and out-of-class assignments, drafting assignments, and/or class participation.

Grading Scale

LETTER GRADE	PERCENTAGE
A	93-100%
A-	90-92.9%
B+	87% - 89.9%
B	83% - 86.9%
B-	80% - 82.9%
C+	77% - 79.9%
C	73% - 76.9%
C-	70% - 72.9%
D+	67% - 69.9%
D	63% - 66.9%
D-	60% - 62.9%
E	<60%

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for LGL 235

LGL240 - Family Law

Overview

Subject
Paralegal

Academic Department
Business & Economics

School
Business, Entrepreneurshp, PD

Course Description
Introduces the laws of divorce, beginning with the pre-commencement interview and ending with filing the final judgment. Covers the substantive and procedural laws of property division, custody, and support in a divorce action. Also examines issues of child abuse, domestic violence, adoption, and post-judgment matters such as modification and relocation.

Course Pre-requisite(s)
ENG131 Introduction College Writing with a C grade or better, or Instructor permission

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Initial Client Interview
2. Prenuptial, Postnuptial, Cohabitation, and Separation Agreements
3. Divorce Litigation
4. Spousal Support and Property Division
5. Child Custody and Support
6. Additional Issues related to marriage such as paternity, maternity, and adoption.

Identify legally significant issues in a divorce action.

Describe how to ethically and sensitively compile a family history from a potential client.

Explain the substantive and procedural laws required for a legally valid prenuptial, postnuptial, cohabitation, agreement.

Describe the no-fault and fault grounds for divorce.

Explain the jurisdiction requirements for dissolving marriage, and resolving issues related to spousal support, child support, and property division.

Identify the components of a divorce complaint/petition.

Describe the pretrial process in a divorce case, including the components of a divorce complaint/petition, pretrial motions, preliminary orders, and main methods of discovery in a divorce.

Summarize what occurs in a divorce trial. Explain the primary methods of alternative dispute resolution (ADR).

Explain the different types of spousal support and methods for enforcing it.

Explain the different types of property that can be awarded in a divorce and the issues related to locating, valuing, and dividing the property.

List other financial matters that must be resolved in a divorce action, such as debt, taxes, and wills.

Describe the tax effect of alimony, child support, and property division.

Describe the different types of custody arrangements available in a divorce.

Discuss the legal issues involved in determining custody visitation and modification.

Describe the state and federal laws affecting the determination, enforcement, and modification of child support.

Explain the custody and support issues involved in nonmartial children, or when an embryo is fertilized by artificial insemination (AI) or other assisted reproductive technologies (ART).

Explain the legal issues surrounding adoption, including the procedures for adoption and the termination of parental rights.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Students will be assessed through quizzes, tests, in-class and out-of-class assignments, drafting assignments, and/or class participation.
Grading Scale

LETTER GRADE	PERCENTAGE
A	93-100%
A-	90-92.9%
B+	87% - 89.9%
B	83% - 86.9%
B-	80% - 82.9%
C+	77% - 79.9%
C	73% - 76.9%
C-	70% - 72.9%
D+	67% - 69.9%
D	63% - 66.9%
D-	60% - 62.9%
E	<60%

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for LGL 240

LGL245 - Estate Planning and Probate

Overview

Subject
Paralegal

Academic Department
Business & Economics

School
Business, Entrepreneurshp, PD

Course Description
Examines laws relating to the control and disposition of property in anticipation of death and post-death under Michigan's Estate and Protected Individuals Code (EPIC). Covers wills, trusts, laws of intestate succession, and powers of attorney. Also covers the substantive, procedural, and practical aspects of probate practice under EPIC from the time of the notification of death through final distribution.

Course Pre-requisite(s)
ENG131 Introduction College Writing with a C grade or better, or Instructor permission

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Property Law
2. Estate and Protected Individuals Code (EPIC)
3. Wills and Trusts
4. Additional Estate Planning Documents
5. Probate
6. Drafting

Review and explain the different types of property ownership.
Distinguish probate and non-probate property.
Identify estate planning and estate administration terms.
Describe the substantive provisions of EPIC.
Explain the laws of intestate succession.
Explain an heir's statutory rights under EPIC.
Identify the elements of a valid will.
Discuss the substantive and procedural laws pertaining to drafting a valid will under EPIC.
Identify the elements of a valid trust.
Differentiate the various types of trusts.
Describe the substantive provisions of a Power of Attorney
Describe the substantive provisions of a Health Care Directive.
Describe the substantive provisions of EPIC that address guardians and conservators.
Discuss the substantive and procedural laws of probate.
Draft one or more documents or pleadings relevant to Estate Planning or Probate.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Students will be assessed through quizzes, tests, in-class and out-of-class assignments, drafting assignments, and/or class participation.

Grading Scale

LETTER GRADE	PERCENTAGE
A	93-100%
A-	90-92.9%
B+	87% - 89.9%
B	83% - 86.9%
B-	80% - 82.9%
C+	77% - 79.9%
C	73% - 76.9%
C-	70% - 72.9%
D+	67% - 69.9%
D	63% - 66.9%
D-	60% - 62.9%
E	<60%

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for LGL 245

LGL248 - Immigration Basics

Overview

Subject
Paralegal

Academic Department
Business & Economics

School
Business, Entrepreneurshp, PD

Course Description
Covers United States immigration law and procedure. Examines post 9/11 immigration policies and laws relating to visas for students and employees, pathways to citizenship, and inadmissibility and removal.

Course Pre-requisite(s)
ENG131 Introduction College Writing Eligible or Instructor Permission

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Laws and Policies of Immigration Law
2. Student and Employee Visas +
3. Green Cards
4. Pathways to Citizenship
5. Inadmissibility and Removal

Explain the laws and policies of immigration law.
Perform computer-related research.
Discuss the laws and issues affecting student and employment visas.
Dicsuss the laws and issues surrounding the immigration of relatives and the acquisition of green cards.
Describe the laws and issues surrounding pathways to citizenship.
Describe the laws and issues surrounding refugees and people seeking asylum.
Prepare immigration documents.
Discuss the laws and issues surrounding inadmissibility and removal.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Quizzes, tests, in-class and out-of-class assignments, drafting assignments, and/or class participation.

Grading Scale

LETTER GRADE	PERCENTAGE
A	93-100%
A-	90-92.9%
B+	87% - 89.9%
B	83% - 86.9%
B-	80% - 82.9%
C+	77% - 79.9%
C	73% - 76.9%
C-	70% - 72.9%
D+	67% - 69.9%
D	63% - 66.9%
D-	60% - 62.9%
E	<60%

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for LGL 248

LGL250 - Business Organizations

Overview

Subject
Paralegal

Academic Department
Business & Economics

School
Business, Entrepreneurshp, PD

Course Description
Examines forms of business organizations including corporations, partnerships, and limited liability companies. Covers the formation, structure, rights, and liabilities associated with each entity, along with the legal consequences of dissolving them. Covers the drafting of documents necessary to create and maintain business entities.

Course Pre-requisite(s)
ENG131 Introduction College Writing with a C grade or better, or Instructor Permission

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Sole Proprietorships
2. Partnerships
3. Limited Liability Companies
4. Corporations

Describe the formation, structure, and rights and liabilities of sole proprietorships.
Identify the advantages and disadvantages of sole proprietorships.
Draft documents relevant to starting a sole proprietorship.
Describe the formation, structure, rights, and liabilities of partnerships.
Identify the advantages and disadvantages of partnerships.
Draft documents relevant to starting a partnership.
Describe the formation, structure, rights, and liabilities of limited liability companies.
Identify the advantages and disadvantages of limited liability companies.
Draft documents relevant to starting a limited liability company.
Distinguish among the different types of corporate structures.
Describe the formation, structure, rights, and liabilities of directors and shareholders of corporations.
Explain the financial structure of corporations.
Identify the advantages and disadvantages of corporations.
Draft documents relevant to starting and maintaining a corporation.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Students will be assessed through quizzes, tests, in-class and out-of-class assignments, drafting assignments, and/or class participation.

Grading Scale

LETTER GRADE	PERCENTAGE
A	93-100%
A-	90-92.9%
B+	87% - 89.9%
B	83% - 86.9%
B-	80% - 82.9%
C+	77% - 79.9%
C	73% - 76.9%
C-	70% - 72.9%
D+	67% - 69.9%
D	63% - 66.9%
D-	60% - 62.9%
E	<60%

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for LGL 250

LGL290 - Co-Op in Paralegal Studies

Overview

Subject
Paralegal

Academic Department
Business & Economics

School
Business, Entrepreneurshp, PD

Course Description
Cooperative education is a structured method of combining classroom-based education with practical work experience. A cooperative education experience, commonly known as a "co-op," provides academic credit for structured employment experience. Work experience must be directly related to the student's declared major to be eligible.To register for this course, a student must have completed 50% of core coursework, maintain an overall GPA of 2.0 and a program specific GPA of 2.5.

Course Pre-requisite(s)
Permission from Career Services Officer or Cooperative Education Officer

Credit Hours
2

Total Contact Hours

Total Instructor Contact Hours:
3

Total Student Contact Hours:
150

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
Student will submit a formal request in writing to the faculty and Associate Dean for work experience to be considered for Credit for Prior College-Level Learning.

The student will complete an interview, a reflective paper, or a presentation to the faculty in which the student develops and describes the learning objectives supported by the work experience, how those learning objectives were achieved and how that learning was put into practice.

Finally, the student must also provide a portfolio (or something comparable) that shows the work completed and provide some form of documentation confirming the work experience (a resume does not suffice) for which Credit for Prior College-Level Learning is requested.

Goals, Topics, and Objectives

Course Goals
Cooperative education helps students make the school-to-work transition, develop career and program-related learning objectives, and work on applicable skills for employment. Placements should provide students with the opportunity to apply and expand upon knowledge learned in the classroom, and develop the skills acquired in their coursework to align with the standards and expectations set by the worksite.

Core Course Topics

1. Professional Dress and Demeanor (attitude, posture, courteousness)
2. Workplace Communication
3. Interviewing Skills
4. Resume Building
5. Networking and Social Media
6. Seeking Employment
7. Career Advancement

Apply classroom knowledge to "real-world" situations by experiencing meaningful legal work in a professional legal setting.

Demonstrate effective, professional-level oral and written communication skills by interacting with supervisors, co-workers, clients, and professionals outside of the co-op office.

Apply ethical and professional work standards relating to client confidentiality, conflicts of interest, and the unauthorized practice of law.

Apply problem-solving and decision-making skills to work-related tasks and assignments.

Develop a portfolio of sample documents drafted on the job (while protecting client confidentiality)

Maintain a Daily Log or Co-op Journal of work performed, including a summary of hours worked using standard billing practices, and a statement analyzing or applying legal concepts to work performed.

Prepare a Final Report summarizing the work performed and explaining how personal learning goals were or were not satisfied.

Students will create 1-3 learning objectives per credit to be approved by instructor for each individual offering.

Build a resume that meets standards of Career Services Officer.

Articulate the reasons for professional attire.

Wear professional attire while on the worksite.

Attend career workshop in professional dress.

Display appropriate professional attitude and demeanor while on the worksite.

Interview effectively.

Attend mock interview, give appropriate answers to five 5 questions

Complete a written job application in a prompt, professional manner
with all information legible, error-free, and thorough.

Display understanding of the appropriate use of Social Media sites
(Facebook, LinkedIn, and Twitter) during Career Services workshop.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment will be determined by the instructor based on what is in the best interest of the student's academic growth, including future employability of the student. Assessment may include, but is not limited to:

- Major final project
- Weekly journal
- Creation and attainment of all learning objectives
- Participation in a career-focused workshop
- Consistent and prompt attendance at worksite
- Employer evaluation

General Course Requirements and Recommendations
To be determined by the instructor. Detailed course syllabi will be standardized for all co-op courses and individual course requirements will be available to the AEC and College Council by request "For information only" for each term that the course is offered.

Texts
See Division for list of required texts

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for LGL 290

LGL295 - Paralegal Internship

Overview

Subject
Paralegal

Academic Department
Business & Economics

School
Business, Entrepreneurshp, PD

Course Description
An unpaid internship which provides paralegal students with the opportunity to apply classroom knowledge to "real-world" situations by experiencing meaningful legal work in a professional setting. Students engage directly with lawyers and other legal professionals to gain work experience directly related to their paralegal studies major.

Course Pre-requisite(s)
Instructor Permission

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
3

Total Student Contact Hours:
140

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Professional Ethics
2. Learning Objectives
3. Paralegal Work-Product
4. Time Management
5. Portfolio
6. Self Assessment

Demonstrate professional and ethical behavior in a legal work environment.

Prepare personalized learning objectives and perform professional activities that meet each objective.

Perform work and assigned tasks in a manner commensurate with a professional paralegal.

Develop time management and billing skills in a manner similar to methods commonly used in a law office.

Create a portfolio of sample legal documents for use in searching for a paralegal position, while protecting client confidentiality.

Complete and document self-assessments of performance at the internship.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Students will be required to:

1. Prepare personalized learning objectives.
2. Maintain and submit a Daily Log of work using standard billing practices.
3. Prepare a Final Report assessing performance.

Grading Scale

LETTER GRADE	PERCENTAGE
A	93-100%
A-	90-92.9%
B+	87% - 89.9%
B	83% - 86.9%
B-	80% - 82.9%
C+	77% - 79.9%
C	73% - 76.9%
C-	70% - 72.9%
D+	67% - 69.9%
D	63% - 66.9%
D-	60% - 62.9%
E	<60%

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for LGL 295

LGL299 - Special Topics in Law

Overview

Subject
Paralegal

Academic Department
Business & Economics

School
Business, Entrepreneurshp, PD

Course Description
Explores selected legal topics with emphasis on current legal trends. Specific special topic will be announced each term the course is offered. Course may be repeated when different topics are offered and a student may earn credit for each different topic. Course may be used toward fulfilling the specific degree requirements for an associate degree.

Course Pre-requisite(s)
ENG131 Introduction College Writing with a grade of C or better, or Instructor Permission

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

Discuss the substantive law of the specific legal topic.

Perform research on the specific legal topic using computer-assisted research tools.

Evaluate the ethical considerations regarding the role of the paralegal in this subject area of law.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Students will be assessed through quizzes, tests, in-class and out-of-class assignments, drafting assignments, and/or class participation.

General Course Requirements and Recommendations
A detailed course syllabus for each section of PLGL 299 must be approved by the Business and Computer Technology Division prior to the course being offered. The syllabus will be presented to the College Council by the Associate Dean of the Business and Computer Technology Division "for information only."

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for LGL 299

MATH010 - Algebra Skills

Overview

Subject
Mathematics

Academic Department
Mathematics

School
Science, Tech, Engr & Math

Course Description
A supplemental course for students taking certain sections of MATH-110: Intermediate Algebra. Topics include simplifying algebraic expressions, solving linear equations, graphs of linear equations, simplifying expressions using laws of integer exponents, and simplifying polynomial expressions.

Course Co-requisite(s)
MATH110 Intermediate Algebra

Credit Hours
2

Total Contact Hours
Total Instructor Contact Hours:
32

Total Student Contact Hours:
32

Course Fee
10

Academic Level
Undergraduate

Goals, Topics, and Objectives

Course Goals
To provide needed just-in-time mathematical support to qualified students who have not met the prerequisite for MATH110 Intermediate Algebra

Core Course Topics

1. Algebraic Expressions and Linear Equations
    1. Use the order of operations.
    2. Apply the distributive property.
    3. Simplify algebraic expressions by distributing and combining like terms.
    4. Translate sentences into linear equations.
    5. Evaluate formulas with values given for some of the variables.
    6. Verify a solution to an equation.
    7. Solve one-step linear equations.
    8. Solve two-step linear equations.
    9. Solve a formula for one of its variables.
2. Graphing Linear Equations
    1. Plot points in the Cartesian coordinate system.
    2. Graph a linear equation by finding and plotting ordered pairs of solutions.
    3. Identify the x- and y-intercepts of a graph.
    4. Find the x- and y-intercepts of a line algebraically.
    5. Graph a linear equation by finding and plotting intercepts.
    6. Use slopes to determine whether two lines are parallel, perpendicular, or neither.
    7. Find equations of lines given a point and the slope, two-points, or a graph.
    8. Find the equation of a horizontal or vertical line given conditions on that line.
3. Polynomial Functions and Exponents
    1. Evaluate exponential expressions.
    2. Simplify exponential expressions using the laws of exponents.
    3. Determine whether a polynomial is a monomial, binomial, or trinomial.
    4. Determine the degree and coefficient of a term and determine the degree of a polynomial.
    5. Evaluate polynomials.
    6. Simplify polynomial expressions.

Algebraic Expressions and Linear Equations: Use the order of operations.

Algebraic Expressions and Linear Equations: Apply the distributive property.

Algebraic Expressions and Linear Equations: Simplify algebraic expressions by distributing and combining like terms.

Algebraic Expressions and Linear Equations: Translate sentences into linear equations.

Algebraic Expressions and Linear Equations: Evaluate formulas with values given for some of the variables.

Algebraic Expressions and Linear Equations: Verify a solution to an equation.

Algebraic Expressions and Linear Equations: Solve one-step linear equations.

Algebraic Expressions and Linear Equations: Solve two-step linear equations.

Algebraic Expressions and Linear Equations: Solve a formula for one of its variables.

Graphing Linear Equations: Plot points in the Cartesian coordinate system.

Graphing Linear Equations: Graph a linear equation by finding and plotting ordered pairs of solutions.

Graphing Linear Equations: Identify the x- and y-intercepts of a graph.

Graphing Linear Equations: Find the x- and y-intercepts of a line algebraically.

Graphing Linear Equations: Graph a linear equation by finding and plotting intercepts.

Graphing Linear Equations: Use slopes to determine whether two lines are parallel, perpendicular, or neither.

Graphing Linear Equations: Find equations of lines given a point and the slope, two-points, or a graph.

Graphing Linear Equations: Find the equation of a horizontal or vertical line given conditions on that line.

Polynomial Functions and Exponents: Evaluate exponential expressions.

Polynomial Functions and Exponents: Simplify exponential expressions using the laws of exponents.

Polynomial Functions and Exponents: Determine whether a polynomial is a monomial, binomial, or trinomial.

Polynomial Functions and Exponents: Determine the degree and coefficient of a term and determine the degree of a polynomial.

Polynomial Functions and Exponents: Evaluate polynomials.

Polynomial Functions and Exponents: Simplify polynomial expressions.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Pass MATH110 Intermediate Algebra with C or better or pass the MATH010 Algebra Skills final exam with the passing score determined by the Mathematics Department.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for MATH 010

MATH031 - Quantitative Reasoning Skills Review

Overview

Subject
Mathematics

Academic Department
Mathematics

School
Science, Tech, Engr & Math

Course Description
A supplemental course for students taking certain sections of MATH-131: Mathematics for the Modern World. Topics include creating and interpreting various types of graphs; geometry, including area, volume and the Pythagorean Theorem; algebra; basic statistics; and arithmetic with signed numbers, fractions, and scientific notation.

Course Pre-requisite(s)
Eligible to take ENG courses at HFC

Course Co-requisite(s)
MATH131 Math for the Modern World

Credit Hours
2

Total Contact Hours
Total Instructor Contact Hours:
32

Total Student Contact Hours:
32

Course Fee
10

Academic Level
Undergraduate

Goals, Topics, and Objectives

Course Goals
To provide needed just-in-time mathematical support to students who have not met the prerequisite for MATH131 Math for the Modern World

Core Course Topics

1. Arithmetic
    1. Add, subtract, multiply or divide fractions.
    2. Add, subtract, multiply or divide integers and other signed numbers.
    3. Apply whole number exponent rules.
    4. Use exponent rules with negative exponents.
    5. Use the order of operations.
    6. Convert between scientific and standard notation.
    7. Multiply and divide numbers written in scientific notation.
    8. Find the approximate square root of a number using a calculator.
    9. Find the square roots of the first few perfect square whole numbers without a calculator.
2. Algebra
    1. Differentiate between variables and constants.
    2. Apply whole number exponent rules.
    3. Use exponent rules with negative exponents.
    4. Apply the commutative and associative properties.
    5. Apply the distributive property.
    6. Simplify algebraic expressions by distributing and combining like terms.
    7. Write equations to model linear situations.
    8. Write equations to model exponential situations.
    9. Evaluate formulas with values given for the independent variables.
    10. Verify a solution to an equation.
    11. Solve linear equations in one variable analytically.
3. Graphs and graphing
    1. Interpret or create a scatterplot.
    2. Plot points in the Cartesian coordinate system.
    3. Find the slope of a line given two points or the graph.
    4. Write the equation of a line in slope-intercept form.
    5. Find the y-intercept of a linear graph given the graph or the equation of the graph.
    6. Interpret the slope as a rate in applied problems.
    7. Graph a line using either a table of values or the slope and y-intercept.
4. Geometry
    1. Apply formulas to find area and volume.
    2. Explain the difference between length, area and volume.
    3. Use the Pythagorean Theorem to solve problems about right triangles.
    4. Use the Pythagorean Theorem or the distance formula to find the distance between two points.
5. Proportion
    1. Increase or decrease a number by a percentage.
    2. Calculate percent of increase or decrease.
    3. Solve percent problems.
    4. Write and solve proportions.
    5. Solve problems using proportions.
    6. Calculate a rate or unit rate.
6. Statistics
    1. Calculate a median.
    2. Calculate a mean.
    3. Determine whether a median or mean better supports an argument based on data.
    4. Calculate a standard deviation.

Arithmetic: Add, subtract, multiply or divide fractions.

Arithmetic: Add, subtract, multiply or divide integers and other signed numbers.

Arithmetic: Apply whole number exponent rules.

Arithmetic: Use exponent rules with negative exponents.

Arithmetic: Use the order of operations.

Arithmetic: Convert between scientific and standard notation.

Arithmetic: Multiply and divide numbers written in scientific notation.

Arithmetic: Find the approximate square root of a number using a calculator.

Arithmetic: Find the square roots of the first few perfect square whole numbers without a calculator.

Algebra: Differentiate between variables and constants.

Algebra: Apply whole number exponent rules.

Algebra: Use exponent rules with negative exponents.

Algebra: Apply the commutative and associative properties.

Algebra: Apply the distributive property.

Algebra: Simplify algebraic expressions by distributing and combining like terms.

Algebra: Write equations to model linear situations.

Algebra: Write equations to model exponential situations.

Algebra: Evaluate formulas with values given for the independent variables.

Algebra: Verify a solution to an equation.

Algebra: Solve linear equations in one variable analytically.

Graphs and Graphing: Interpret or create a scatterplot.

Graphs and Graphing: Plot points in the Cartesian coordinate system.

Graphs and Graphing: Find the slope of a line given two points or the graph.

Graphs and Graphing: Write the equation of a line in slope-intercept form.

Graphs and Graphing: Find the y-intercept of a linear graph given the graph or the equation of the graph.

Graphs and Graphing: Interpret the slope as a rate in applied problems.

Graphs and Graphing: Graph a line using either a table of values or the slope and y-intercept.

Geometry: Apply formulas to find area and volume.

Geometry: Explain the difference between length, area and volume.

Geometry: Use the Pythagorean Theorem to solve problems about right triangles.

Geometry: Use the Pythagorean Theorem or the distance formula to find the distance between two points.

Proportion: Increase or decrease a number by a percentage.

Proportion: Calculate percent of increase or decrease.

Proportion: Solve percent problems.

Proportion: Write and solve proportions.

Proportion: Solve problems using proportions.

Proportion: Calculate a rate or unit rate.

Statistics: Calculate a median.

Statistics: Calculate a mean.

Statistics: Determine whether a median or mean better supports an argument based on data.

Statistics: Calculate a standard deviation.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Pass MATH131 Math for the Modern World with C or better or pass the MATH031 Quantitative Reasoning Skills final exam with the passing score determined by the Mathematics Department.

General Course Requirements and Recommendations
Pass MATH131 Math for the Modern World with C or better or pass the MATH031 Quantitative Reasoning Skills final exam with the passing score determined by the Mathematics Department.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for MATH 031

MATH041 - Introductory Statistics Skills

Overview

Subject
Mathematics

Academic Department
Mathematics

School
Science, Tech, Engr & Math

Course Description
A supplemental course for students taking certain sections of MATH-141. Topics include numbers and the number line, operations on numbers, sets, equations and inequalities, graphing points and lines in two dimensions, reading graphs and tables, and approximating areas. In addition, students will be able to apply mathematical tools in real-world settings and interpret results in context.

Course Pre-requisite(s)
Eligible to take ENG courses at HFC

Course Co-requisite(s)
MATH141 Introduction to Statistics

Credit Hours
2

Total Contact Hours
Total Instructor Contact Hours:
32

Total Student Contact Hours:
32

Course Fee
10

Academic Level
Undergraduate

Goals, Topics, and Objectives

Course Goals
To provide needed just-in-time mathematical support for students who have not met the prerequisite for MATH141 Introduction to Statistics. There will be an emphasis on reading, problem solving, and writing skills throughout the course as they are needed in the practice of statistics.

Core Course Topics

1. Numbers and the Number Line
    1. Plot points and intervals on the number line
    2. Represent an inequality as an interval on the number line
    3. Find the distance between two points on the number line
    4. Find the midpoint between two points on the number line
    5. Round decimals
    6. Order decimal numbers
    7. Convert numbers between scientific and standard notation
    8. Convert between fractions, decimals, and percents
2. Operations on Numbers
    1. Perform signed numbers arithmetic
    2. Calculate powers of a numbers using technology
    3. Calculate the square root of a number (using technology)
    4. Use summation notation
    5. Use order of operations in expressions and formulas
3. Sets
    1. Use set notation
    2. Use Venn diagrams
    3. Find the complement of a set
    4. Find the union and the intersection of two sets
4. Equations and Inequalities
    1. Evaluate algebraic expressions
    2. Solve a linear equation in one variable
5. Graphing Points and Lines in the Cartesian Coordinate System
    1. Plot ordered pairs (x, y) in the rectangular coordinates system
    2. Understand the slope as the change in y associated with a 1-unit change in x.
    3. Find the slope of a line given two points or the graph
    4. Identify and interpret slope as a rate of change
    5. Write the equation of the line in slope-intercept form
    6. Given the equation of the line, draw the graph of the line
    7. Using the equation of the line, find the y-value associated with a given x-value.
    8. Find a vertical distance between a point and a line
6. Reading Tables and Graphs and Approximating Areas
    1. Extract information from tables and graphs
    2. Given the total area under a curve or a histogram, approximate the area of a shaded region.

Numbers and the Number Line: Plot points and intervals on the number line

Numbers and the Number Line: Represent an inequality as an interval on the number line

Numbers and the Number Line: Find the distance between two points on the number line

Numbers and the Number Line: Find the midpoint between two points on the number line

Numbers and the Number Line: Round decimals

Numbers and the Number Line: Order decimal numbers

Numbers and the Number Line: Convert numbers between scientific and standard notation

Numbers and the Number Line: Convert between fractions, decimals, and percents

Operations on Numbers: Perform signed numbers arithmetic

Operations on Numbers: Calculate powers of a numbers using technology

Operations on Numbers: Calculate the square root of a number (using technology)

Operations on Numbers: Use summation notation

Operations on Numbers: Use order of operations in expressions and formulas

Sets: Use set notation

Sets: Use Venn diagrams

Sets: Find the complement of a set

Sets: Find the union and the intersection of two sets

Equations and Inequalities: Evaluate algebraic expressions

Equations and Inequalities: Solve a linear equation in one variable

Graphing Points and Lines in the Cartesian Coordinate System: Plot ordered pairs (x, y) in the rectangular coordinates system

Graphing Points and Lines in the Cartesian Coordinate System: Understand the slope as the change Graphing Points and Lines in the Cartesian Coordinate System: in y associated with a 1-unit change in x.

Graphing Points and Lines in the Cartesian Coordinate System: Find the slope of a line given two points or the graph

Graphing Points and Lines in the Cartesian Coordinate System: Identify and interpret slope as a rate of change

Graphing Points and Lines in the Cartesian Coordinate System: Write the equation of the line in slope-intercept form

Graphing Points and Lines in the Cartesian Coordinate System: Given the equation of the line, draw the graph of the line

Graphing Points and Lines in the Cartesian Coordinate System: Using the equation of the line, find the y-value associated with a given x-value.

Find a vertical distance between a point and a line

Reading Tables and Graphs and Approximating Areas: Extract information from tables and graphs

Reading Tables and Graphs and Approximating Areas: Given the total area under a curve or a histogram, approximate the area of a shaded region.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Pass MATH141 Introduction to Statistics with C or better or pass the MATH041 Intro Statistics Skills Review final exam with the passing score determined by the Mathematics Department.

General Course Requirements and Recommendations
Pass MATH141 Introduction to Statistics with C or better or pass the MATH041 Intro Statistics Skills Review final exam with the passing score determined by the Mathematics Department.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for MATH 041

MATH095 - Bridge to Success in Mathematics

Overview

Subject
Mathematics

Academic Department
Mathematics

School
Science, Tech, Engr & Math

Course Description
Utilizes adaptive and/or modular software to assist students in learning or refreshing mathematics skills. Topics vary by individual student. Course supports satisfying mathematics prerequisites across disciplines. Requires regular on campus attendance and access to an online homework management system.

Credit Hours
1

Total Contact Hours
Total Instructor Contact Hours:
16

Total Student Contact Hours:
16

Academic Level
Undergraduate

Goals, Topics, and Objectives

Course Goals
1. To develop in students a basic understanding of mathematical concepts, principles, and methods appropriate for their goals.
1. To develop in students skills necessary for success in subsequent mathematics courses and other courses requiring mathematical skills.

Core Course Topics

1. Arithmetic
    1. Perform operations with whole numbers.
    2. Perform operations with fractions.
    3. Perform operations with decimals.
    4. Perform operations with signed numbers.
    5. Round numbers.
2. Algebra
    1. Solve percent problems.
    2. Solve proportions.
    3. Solve linear equations.
    4. Solve and graph linear inequalities.
    5. Graph lines.
    6. Write equations of lines.
    7. Solve systems of equations.
    8. Determine whether a relation is a function.
    9. Evaluate functions.
    10. Apply laws of exponents.
    11. Represent numbers with scientific notation.
    12. Factor polynomial expressions.
    13. Solve quadratic equations.
    14. Graph quadratic functions.
    15. Solve problems involving general polynomial functions.
    16. Perform operations on rational expressions.
    17. Solve rational equations.
    18. Graph rational functions.
    19. Simplify radical expressions.
    20. Simplify expressions involving rational exponents.
    21. Solve exponential equations.
    22. Apply properties of logarithms.
    23. Solve logarithmic equations.
3. Geometry and Trigonometry
    1. Apply basic geometric principles to solve problems.
    2. Apply right-angle trigonometric principles to solve problems.
    3. Apply general trigonometric principles to solve problems.

Arithmetic: Perform operations with whole numbers.

Arithmetic: Perform operations with fractions.

Arithmetic: Perform operations with decimals.

Arithmetic: Perform operations with signed numbers.

Arithmetic: Round numbers.

Algebra: Solve percent problems.

Algebra: Solve proportions.

Algebra: Solve linear equations.

Algebra: Solve and graph linear inequalities.

Algebra: Graph lines.

Algebra: Write equations of lines.

Algebra: Solve systems of equations.

Algebra: Determine whether a relation is a function.

Algebra: Evaluate functions.

Algebra: Apply laws of exponents.

Algebra: Represent numbers with scientific notation.

Algebra: Factor polynomial expressions.

Algebra: Solve quadratic equations.

Algebra: Graph quadratic functions.

Algebra: Solve problems involving general polynomial functions.

Algebra: Perform operations on rational expressions.

Algebra: Solve rational equations.

Algebra: Graph rational functions.

Algebra: Simplify radical expressions.

Algebra: Simplify expressions involving rational exponents.

Algebra: Solve exponential equations.

Algebra: Apply properties of logarithms.

Algebra: Solve logarithmic equations.

Geometry and Trigonometry: Apply basic geometric principles to solve problems.

Geometry and Trigonometry: Apply right-angle trigonometric principles to solve problems.

Geometry and Trigonometry: Apply general trigonometric principles to solve problems.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
- All students will be required to complete the minimum number of required hours using the course's online homework system.
- Additional assessment of student achievement may include assignments, quizzes, and exams.

General Course Requirements and Recommendations
- Students must bring a non-graphing scientific calculator to all class sessions.
- Access to an online homework management system is also required.

Grading Scale
S/U

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for MATH 095

MATH100 - Basic Technical Mathematics

Overview

Subject
Mathematics

Academic Department
Mathematics

School
Science, Tech, Engr & Math

Course Description
For those in technology programs who have not completed one year of algebra and one year of geometry or who need to review beginning algebra and geometry. Covers a review of arithmetic; signed numbers; scientific notation; measurement conversions; and an introduction to beginning algebra, geometry, and statistics. Emphasizes practical technical applications and requires the use of a non-graphing scientific calculator.

Credit Hours
4

Total Contact Hours
Total Instructor Contact Hours:
62

Total Student Contact Hours:
62

Course Fee
10

Academic Level
Undergraduate

General Education Category
Mathematics

Michigan Transfer Agreement (MTA) Category
Category 3: Mathematics - Applied Degrees

Goals, Topics, and Objectives

Course Goals

1. To review arithmetic processes, and to introduce signed numbers, scientific notation, and measurement conversions.
2. To introduce the fundamentals of algebra and geometry which provide the necessary background for more advanced mathematics courses.
3. To develop the problem-solving skills needed to interpret, analyze, and solve application problems involving arithmetic and basic algebra, geometry, and statistics that relate to technical areas.

Core Course Topics

1. Whole Numbers
    1. Evaluate expressions using the order of operations.
    2. Solve applied problems.
2. Fractions
    1. Add and subtract fractions.
    2. Multiply and divide fractions.
    3. Solve applied problems.
3. Decimals and Percents
    1. Convert between fractions, decimals, and percents.
    2. Round decimals to a particular place value.
    3. Solve applied problems.
4. Signed Numbers
    1. Add and subtract signed whole numbers and fractions.
    2. Multiply and divide signed whole numbers and fractions.
5. Scientific Notation
    1. Use the rules of exponents for powers of 10.
    2. Write numerical values in scientific notation.
    3. Add, subtract, multiply, and divide using numerical values expressed in scientific notation.
6. Measurements
    1. Understand basic concepts of the metric system.
    2. Convert measurements within the U. S. system and within the metric system.
    3. Use conversion factors to change measurements from the U. S. system to the metric system and vice versa.
7. Polynomials
    1. Evaluate algebraic expressions by substitution.
    2. Simplify algebraic expressions by removing grouping symbols and combining like terms.
    3. Add and subtract polynomials.
    4. Multiply monomials and polynomials.
    5. Divide a monomial and a polynomial by a monomial.
8. Equations and Formulas
    1. Solve linear equations.
    2. Translate words into algebraic symbols.
    3. Solve a formula or literal equation for a particular variable.
    4. Solve applied problems.
9. Ratio and Proportion
    1. Reduce ratios.
    2. Solve proportions.
    3. Solve applied problems.
10. Basic Geometry
    1. Apply basic definitions and relationships for angles, lines, and geometric figures to solve applied problems.
    2. Find the area and perimeter of quadrilaterals and triangles.
    3. Use the Pythagorean Theorem to find the missing side of a right triangle.
    4. Use the relationships of similar polygons to solve applied problems using proportions.
    5. Find the circumference and area of circles.
    6. Find the volume, lateral surface area, and total surface area of prisms, cylinders, and spheres.
11. Basic Statistics
    1. Read and interpret bar, line, and circle graphs.
    2. Find the mean, median, and mode for a set of data.
12. Scientific Calculator
    1. Demonstrate proficiency in using a non-graphing scientific calculator for basic arithmetic operations.
    2. Demonstrate proficiency in using a non-graphing scientific calculator to help solve applied problems involving measurement conversions, proportions, geometric figures, and statistics.

Whole Numbers: Evaluate expressions using the order of operations.

Whole Numbers: Solve applied problems.

Fractions: Add and subtract fractions.

Fractions: Multiply and divide fractions.

Fractions: Solve applied problems.

Decimals and Percents: Convert between fractions, decimals, and percents.

Decimals and Percents: Round decimals to a particular place value.

Decimals and Percents: Solve applied problems.

Signed Numbers: Add and subtract signed whole numbers and fractions.

Signed Numbers: Multiply and divide signed whole numbers and fractions.

Scientific Notation: Use the rules of exponents for powers of 10.

Scientific Notation: Write numerical values in scientific notation.

Scientific Notation: Add, subtract, multiply, and divide using numerical values expressed in scientific notation.

Measurements: Understand basic concepts of the metric system.

Measurements: Convert measurements within the U. S. system and within the metric system.

Measurements: Use conversion factors to change measurements from the U. S. system to the metric system and vice versa.

Polynomials: Evaluate algebraic expressions by substitution.

Polynomials: Simplify algebraic expressions by removing grouping symbols and combining like terms.

Polynomials: Add and subtract polynomials.

Polynomials: Multiply monomials and polynomials.

Polynomials: Divide a monomial and a polynomial by a monomial.

Equations and Formulas: Solve linear equations.

Equations and Formulas: Translate words into algebraic symbols.

Equations and Formulas: Solve a formula or literal equation for a particular variable.

Equations and Formulas: Solve applied problems.

Ratio and Proportion: Reduce ratios.

Ratio and Proportion: Solve proportions.

Ratio and Proportion: Solve applied problems.

Basic Geometry: Apply basic definitions and relationships for angles, lines, and geometric figures to solve applied problems.

Basic Geometry: Find the area and perimeter of quadrilaterals and triangles.

Basic Geometry: Use the Pythagorean Theorem to find the missing side of a right triangle.

Basic Geometry: Use the relationships of similar polygons to solve applied problems using proportions.

Basic Geometry: Find the circumference and area of circles.

Basic Geometry: Find the volume, lateral surface area, and total surface area of prisms, cylinders, and spheres.

Basic Statistics: Read and interpret bar, line, and circle graphs.

Basic Statistics: Find the mean, median, and mode for a set of data.

Scientific Calculator: Demonstrate proficiency in using a non-graphing scientific calculator for basic arithmetic operations.

Scientific Calculator: Demonstrate proficiency in using a non-graphing scientific calculator to help solve applied problems involving measurement conversions, proportions, geometric figures, and statistics.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement

- All students are required to complete a comprehensive final examination that assesses the learning of all course objectives. This final examination must be weighted in a manner so that this exam score is worth a minimum of twenty percent (20%) of the student's final course grade. In selected semesters this final exam may be a common final exam administered to all sections of MATH100 Basic Tech Mathematics.
- All students will be required to complete at least two (2) proctored on-campus exams. The cumulative value of these exams must be at least forty percent (40%) of a student's final course grade.
- Additional assessment of student achievement may include assignments, quizzes, and exams.
- *Attendance* is defined as presence. While regular engagement is critical for student success, no grade-bearing credit shall be awarded solely for attendance.
- *Participation* (also referred to as engagement) is defined as the completion of an academic activity. To ensure that course grades continue to primarily reflect activities that lead to or demonstrate mastery of the mathematics curriculum, participation may account for no more than 10% of the overall course grade in all Mathematics Department courses.
- Application problems must be included on all exams, including the final exam.
- The Critical Thinking Activities must be administered during the semester. Due to the challenging nature of these activities, instructors must use class time to start each activity and to engage students in the critical thinking portion of the problem-solving process. The collection of all critical thinking activities must be weighted in a manner so that the total of this collection is worth between six percent (6%) and twelve percent (12%) of the student's final course grade.

General Course Requirements and Recommendations

1. Students must bring a non-graphing scientific calculator to all class sessions.
2. Application problems must be covered in all mathematics courses. In any course outline, every section that includes application problems must be covered.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for MATH 100

MATH101 - Mathematics for Health Careers

Overview

Subject
Mathematics

Academic Department
Mathematics

School
Science, Tech, Engr & Math

Course Description
Explores the mathematical skills required for various careers in the health professions. Includes computational skills, essential algebraic concepts, problem-solving strategies, ratio and proportion, dimensional analysis, measurement and geometry, and an introduction to data analysis with problems chosen to represent those commonly encountered in health careers. Requires a non-graphing scientific calculator.

Credit Hours
4

Total Contact Hours

Total Instructor Contact Hours:
62

Total Student Contact Hours:
62

Course Fee
10

Academic Level
Undergraduate

General Education Category
Mathematics

Michigan Transfer Agreement (MTA) Category
Category 3: Mathematics - Applied Degrees

Goals, Topics, and Objectives

Course Goals

1. To develop the basic mathematical skills necessary for health careers students.
2. To encourage the development of problem-solving skills.

Core Course Topics

1. Arithmetic of Whole Numbers, Fractions, Decimals, and Percents
    1. Find least common multiples of whole numbers.
    2. Model and find equivalent fractions and mixed numbers.
    3. Add, subtract, multiply, and divide fractions and mixed numbers.
    4. Round decimals to a specific place value.
    5. Add, subtract, multiply, and divide decimals.
    6. Convert between fractions, decimals, and percents.
    7. Perform arithmetic operations using the order of operations for whole numbers, fractions, and decimals.
    8. Demonstrate proficiency using a calculator to perform basic operations with whole numbers, fractions, and decimals.
2. Arithmetic of Signed Numbers
    1. Add and subtract signed numbers.
    2. Multiply and divide signed numbers.
3. Scientific Notation
    1. Convert between scientific notation and standard decimal notation.
    2. Perform arithmetic operations on numbers in scientific notation.
4. Measurements (Approximate Numbers)
    1. Determine the accuracy, precision, maximum error, and percent error of a measurement.
    2. Compare the accuracy, precision, maximum error, and percent error of a group of measurements.
    3. Perform arithmetic operations on a group of measurements and round the results using the conventional rounding rules for measurements.
5. Ratio and Proportion
    1. Write ratios, rates, and unit rates, and set up proportions.
    2. Solve ratio, rate, and proportion application problems.
    3. Solve percent applications using proportions.
6. Measurement Systems
    1. Convert within the U.S. Customary system.
    2. Perform arithmetic operations with measurements of weight, capacity, length, and time.
    3. Convert measurements within the Metric measurement system.
    4. Convert between the U.S. Customary system and the Metric system.
    5. Convert measurements within the Apothecary measurement system.
    6. Convert between the Apothecary system and the Metric system.
    7. Convert between Fahrenheit and Celsius temperature scales.
7. Basic Algebra
    1. Perform basic operations on polynomials.
    2. Solve linear equations.
    3. Graph linear equations.
8. Applications to Health Career Professions
    1. Use dimensional analysis or proportions to solve application problems involving medication dosages.
9. Descriptive Statistical Measures
    1. Compute and interpret the meaning of simple descriptive statistical measures.
    2. Interpret tables and graphs such as bar graphs, histograms, line graphs, pie charts, and pareto graphs.

Arithmetic of Whole Numbers, Fractions, Decimals, and Percents: Find least common multiples of whole numbers.

Arithmetic of Whole Numbers, Fractions, Decimals, and Percents: Model and find equivalent fractions and mixed numbers.

Arithmetic of Whole Numbers, Fractions, Decimals, and Percents: Add, subtract, multiply, and divide fractions and mixed numbers.

Arithmetic of Whole Numbers, Fractions, Decimals, and Percents: Round decimals to a specific place value.

Arithmetic of Whole Numbers, Fractions, Decimals, and Percents: Add, subtract, multiply, and divide decimals.

Arithmetic of Whole Numbers, Fractions, Decimals, and Percents: Convert between fractions, decimals, and percents.

Arithmetic of Whole Numbers, Fractions, Decimals, and Percents: Perform arithmetic operations using the order of operations for whole numbers, fractions, and decimals.

Arithmetic of Whole Numbers, Fractions, Decimals, and Percents: Demonstrate proficiency using a calculator to perform basic operations with whole numbers, fractions, and decimals.

Arithmetic of Signed Numbers: Add and subtract signed numbers.

Arithmetic of Signed Numbers: Multiply and divide signed numbers.

Scientific Notation: Convert between scientific notation and standard decimal notation.

Scientific Notation: Perform arithmetic operations on numbers in scientific notation.

Measurements (Approximate Numbers): Determine the accuracy, precision, maximum error, and percent error of a measurement.

Measurements (Approximate Numbers): Compare the accuracy, precision, maximum error, and percent error of a group of measurements.

Measurements (Approximate Numbers): Perform arithmetic operations on a group of measurements and round the results using the conventional rounding rules for measurements.

Ratio and Proportion: Write ratios, rates, and unit rates, and set up proportions.

Ratio and Proportion: Solve ratio, rate, and proportion application problems.

Ratio and Proportion: Solve percent applications using proportions.

Measurement Systems: Convert within the U.S. Customary system.

Measurement Systems: Perform arithmetic operations with measurements of weight, capacity, length, and time.

Measurement Systems: Convert measurements within the Metric measurement system.

Measurement Systems: Convert between the U.S. Customary system and the Metric system.

Measurement Systems: Convert measurements within the Apothecary measurement system.

Measurement Systems: Convert between the Apothecary system and the Metric system.

Measurement Systems: Convert between Fahrenheit and Celsius temperature scales.

Basic Algebra: Perform basic operations on polynomials.

Basic Algebra: Solve linear equations.

Basic Algebra: Graph linear equations.

Applications to Health Career Professions: Use dimensional analysis or proportions to solve application problems involving medication dosages.

Descriptive Statistical Measures: Compute and interpret the meaning of simple descriptive statistical measures.

Descriptive Statistical Measures: Interpret tables and graphs such as bar graphs, histograms, line graphs, pie charts, and pareto graphs.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement

- A comprehensive final examination, weighted in a manner that is worth at least twenty percent (20%) of the final course grade, is required for all sections.
- Additional assessment of student achievement may include assignments, quizzes, and exams.
- *Attendance* is defined as presence. While regular engagement is critical for student success, no grade-bearing credit shall be awarded solely for attendance.
- *Participation* (also referred to as engagement) is defined as the completion of an academic activity. To ensure that course grades continue to primarily reflect activities that lead to or demonstrate mastery of the mathematics curriculum, participation may account for no more than 10% of the overall course grade in all Mathematics Department courses.
- Application problems must be included on all exams, including the final exam.

General Course Requirements and Recommendations

- A non-graphing scientific calculator is required of each student. Any calculator capable of calculating the values of trigonometric, logarithmic, and exponential functions is acceptable.
- Application problems must be covered in all mathematics courses. In any course outline, every section that includes application problems must be covered.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for MATH 101

MATH103 - Technical Mathematics

Overview

Subject
Mathematics

Academic Department
Mathematics

School
Science, Tech, Engr & Math

Course Description
For students in technology programs who have had MATH 100 or one year of Beginning Algebra. Covers functions and graphs, properties of lines, the trigonometric functions, systems of linear equations, rational expressions, quadratic equations, solution of right triangles, vectors, integer exponents, linear regression, complex numbers, and an introduction to the non-graphing scientific calculator. Requires a non-graphing scientific calculator for some formal assessments.

Course Pre-requisite(s)
MATH100 Basic Tech Mathematics with a C grade or better OR a satisfactory score on the placement test

Credit Hours
4

Total Contact Hours
Total Instructor Contact Hours:
62

Total Student Contact Hours:
62

Course Fee
10

Academic Level
Undergraduate

General Education Category
Mathematics

Michigan Transfer Agreement (MTA) Category
Category 3: Mathematics - Applied Degrees

Goals, Topics, and Objectives

Course Goals

1. To introduce trigonometry and develop proficiency in algebraic and trigonometric computations for problem solving in technical areas.
2. To develop additional mathematical background for more advanced courses that require mathematical competency.
3. To develop skills in the use of a non-graphing scientific calculator and to incorporate graphing utilities whenever appropriate to illustrate concepts and to solve problems.

Core Course Topics

1. Measurement
    1. Define the rules for significant digits.
    2. Define the accuracy and precision of measurement.
    3. Define approximate versus exact numbers.
    4. Perform basic arithmetic operations with measurements.
2. Exponents and Radicals
    1. State the laws of exponents.
    2. Simplify algebraic expressions using the laws of exponents.
    3. Simplify square roots and cube roots.
3. Linear Equations, Formulas, and Variation
    1. Solve linear equations algebraically.
    2. Solve formulas for the specified variable.
    3. Solve problems involving direct variation, inverse variation, and joint variation.
4. Right Triangle Trigonometry
    1. Determine the values of the six trigonometric functions of any angle in degrees.
    2. Solve right triangles and solve applications of the right triangle.
5. Functions and Graphs
    1. Define relations and functions.
    2. Determine the domain and range of relations and functions.
    3. Evaluate functions.
    4. Solve equations graphically.
    5. Determine the slope of a line.
    6. Determine the equation of a line satisfying given conditions including parallel and perpendicular lines.
    7. Find the distance between two points.
    8. Find the midpoint of a line segment.
6. Trigonometric Functions
    1. Define and draw positive and negative angles in standard position.
    2. State the definitions of the six trigonometric functions associated with an angle in standard position.
    3. State the signs of the trigonometric functions of nonquadrantal angles and the values of the trigonometric functions of quadrantal angles.
    4. Define the reference angle of any nonquadrantal angle in standard position.
    5. Determine angles, using a scientific calculator, when the value of the trigonometric function is given.
7. Vectors
    1. Add vectors geometrically.
    2. Resolve a vector into components.
    3. Perform vector addition by components.
    4. Solve vector application problems.
8. Factoring and Algebraic Fractions
    1. Express polynomials in completely factored form.
    2. Reduce algebraic fractions to lowest terms.
    3. Multiply, divide, add, and subtract algebraic fractions.
    4. Simplify complex fractions.
9. Systems of Linear Equations
    1. Solve a linear system of two equations in two variables, graphically and algebraically.
    2. Solve application problems using a system of two linear equations.
10. Quadratic Equations
    1. Solve quadratic equations by factoring (whenever possible), using the square roots (whenever possible), and using the quadratic formula.
    2. Solve applications involving quadratic equations.
11. Complex Numbers
    1. Perform basic operations of addition, subtraction, multiplication, and division on complex numbers.

Measurement: Define the rules for significant digits.

Measurement: Define the accuracy and precision of measurement.

Measurement: Define approximate versus exact numbers.

Measurement: Perform basic arithmetic operations with measurements.

Exponents and Radicals: State the laws of exponents.

Exponents and Radicals: Simplify algebraic expressions using the laws of exponents.

Exponents and Radicals: Simplify square roots and cube roots.

Linear Equations, Formulas, and Variation: Solve linear equations algebraically.

Linear Equations, Formulas, and Variation: Solve formulas for the specified variable.

Linear Equations, Formulas, and Variation: Solve problems involving direct variation, inverse variation, and joint variation.

Right Triangle Trigonometry: Determine the values of the six trigonometric functions of any angle in degrees.

Right Triangle Trigonometry: Solve right triangles and solve applications of the right triangle.

Functions and Graphs: Define relations and functions.

Functions and Graphs: Determine the domain and range of relations and functions.

Functions and Graphs: Evaluate functions.

Functions and Graphs: Solve equations graphically.

Functions and Graphs: Determine the slope of a line.

Functions and Graphs: Determine the equation of a line satisfying given conditions including parallel and perpendicular lines.

Functions and Graphs: Find the distance between two points.

Functions and Graphs: Find the midpoint of a line segment.

Trigonometric Functions: Define and draw positive and negative angles in standard position.

Trigonometric Functions: State the definitions of the six trigonometric functions associated with an angle in standard position.

Trigonometric Functions: State the signs of the trigonometric functions of nonquadrantal angles and the values of the trigonometric functions of quadrantal angles.

Trigonometric Functions: Define the reference angle of any nonquadrantal angle in standard position.

Trigonometric Functions: Determine angles, using a scientific calculator, when the value of the trigonometric function is given.

Vectors: Add vectors geometrically.

Vectors: Resolve a vector into components.

Vectors: Perform vector addition by components.

Vectors: Solve vector application problems.

Factoring and Algebraic Fractions: Express polynomials in completely factored form.

Factoring and Algebraic Fractions: Reduce algebraic fractions to lowest terms.

Factoring and Algebraic Fractions: Multiply, divide, add, and subtract algebraic fractions.

Factoring and Algebraic Fractions: Simplify complex fractions.

Systems of Linear Equations: Solve a linear system of two equations in two variables, graphically and algebraically.

Systems of Linear Equations: Solve application problems using a system of two linear equations.

Quadratic Equations: Solve quadratic equations by factoring (whenever possible), using the square roots (whenever possible), and using the quadratic formula.

Quadratic Equations: Solve applications involving quadratic equations.

Complex Numbers: Perform basic operations of addition, subtraction, multiplication, and division on complex numbers.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement

- All students are required to complete a comprehensive final examination that assesses the learning of all course objectives. This final examination must be weighted in a manner so that this exam score is worth a minimum of fifteen percent (15%) of the student's final course grade. In selected semesters this final exam may be a common final exam administered to all sections of MATH-103.
- All students will be required to complete at least two (2) proctored on-campus exams. The cumulative value of these exams must be at least forty percent (40%) of a student's final course grade.
- For proctored in-person formal assessments (quizzes, tests, and exams), the only technology students can use is a non-graphing scientific calculator. Quizzes, tests, and exams may have non-calculator parts. Class projects and informal assessments will require students to use a free graphing application to support learning.
- Additional assessment of student achievement may include assignments, quizzes, and exams.
- Application problems must be included on all exams, including the final exam.

General Course Requirements and Recommendations

- A non-graphing scientific calculator is required for formal assessments.
- Free graphing applications may be used to support learning for informal assessments and class work.
- Application problems must be covered in all mathematics courses. In any course outline, every section that includes application problems must be covered.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for MATH 103

MATH104 - Mathematics for Food Service Careers

Overview

Subject
Mathematics

Academic Department
Mathematics

School
Science, Tech, Engr & Math

Course Description
Explores the mathematical skills required for various careers in the food service profession. Topics include calculator usage, computational skills, ratio and proportion, percentages, measurement, dimensional analysis, and an introduction to data analysis with problems chosen to represent those commonly encountered in the food service profession. Requires a non-graphing scientific calculator.

Credit Hours
4

Total Contact Hours
Total Instructor Contact Hours:
62

Total Student Contact Hours:
62

Course Fee
10

Academic Level
Undergraduate

General Education Category
Mathematics

Michigan Transfer Agreement (MTA) Category
Category 3: Mathematics - Applied Degrees

Goals, Topics, and Objectives

Course Goals

1. To develop the basic mathematical skills necessary for food service careers students.
2. To encourage the development of problem-solving skills.

Core Course Topics

1. Arithmetic of Whole Numbers, Fractions, Decimals, and Percents
    1. Add, subtract, multiply, and divide whole numbers.
    2. Find least common multiples of whole numbers.
    3. Model and find equivalent fractions and mixed numbers.
    4. Add, subtract, multiply, and divide fractions and mixed numbers.
    5. Round decimals to a specific place value.
    6. Add, subtract, multiply, and divide decimals.
    7. Convert between fractions, decimals, and percents.
    8. Perform arithmetic operations using the order of operations for whole numbers, fractions, and decimals.
    9. Demonstrate proficiency using a non-graphing scientific calculator to perform basic operations with whole numbers, fractions, and decimals.
2. Ratio and Proportion
    1. Write ratios, rates, and unit rates.
    2. Set up, solve, and check proportions.
    3. Solve ratio, rate, and proportion application problems.
    4. Solve percent applications using proportions.
    5. Solve percent increase and decrease application problems using proportions.
3. Measurement Systems
    1. Convert within the U.S. Customary system.
    2. Perform arithmetic operations with measurements of weight, capacity, length, and time.
    3. Convert between Fahrenheit and Celsius temperature scales.
    4. Convert measurements within the Metric measurement system.
    5. Convert between the U.S. Customary system and the Metric system.
4. Applications to Food Service Professions
    1. Calculate the most economical purchase, total cost, total hourly wages, and salaries.
    2. Solve application problems related to portion size, cost per serving, number of portions, amount to order, and yield percents.
    3. Solve application problems such as recipe conversions, recipe yields, and baker's percentage.
    4. Solve application problems such as recipe conversions, extension costs, "As Purchased" (AP) and "Edible Portion" (EP) amounts and costs, recipe yield, and labor costs.
    5. Solve application problems such as menu pricing, food costs, labor costs, and percents.
    6. Calculate inventory, associated food costs, and food cost percentages.
    7. Prepare and answer questions related to requisitions, invoices, and purchase orders.
    8. Prepare and answer questions related to production reports.
    9. Calculate beverage quantities and percentages.
    10. Calculate customer checks, compute tax and gratuities, determine covers, write checks, and reconcile banking statements.
    11. Calculate payroll, profits, and losses.
5. Descriptive Statistical Measures
    1. Compute and interpret the meaning of simple descriptive statistical measures.

Arithmetic of Whole Numbers, Fractions, Decimals, and Percents: Add, subtract, multiply, and divide whole numbers.

Arithmetic of Whole Numbers, Fractions, Decimals, and Percents: Find least common multiples of whole numbers.

Arithmetic of Whole Numbers, Fractions, Decimals, and Percents: Model and find equivalent fractions and mixed numbers.

Arithmetic of Whole Numbers, Fractions, Decimals, and Percents: Add, subtract, multiply, and divide fractions and mixed numbers.

Arithmetic of Whole Numbers, Fractions, Decimals, and Percents: Round decimals to a specific place value.

Arithmetic of Whole Numbers, Fractions, Decimals, and Percents: Add, subtract, multiply, and divide decimals.

Arithmetic of Whole Numbers, Fractions, Decimals, and Percents: Convert between fractions, decimals, and percents.

Arithmetic of Whole Numbers, Fractions, Decimals, and Percents: Perform arithmetic operations using the order of operations for whole numbers, fractions, and decimals.

Arithmetic of Whole Numbers, Fractions, Decimals, and Percents: Demonstrate proficiency using a non-graphing scientific calculator to perform basic operations with whole numbers, fractions, and decimals.

Ratio and Proportion: Write ratios, rates, and unit rates.

Ratio and Proportion: Set up, solve, and check proportions.

Ratio and Proportion: Solve ratio, rate, and proportion application problems.

Ratio and Proportion: Solve percent applications using proportions.

Ratio and Proportion: Solve percent increase and decrease application problems using proportions.

Measurement Systems: Convert within the U.S. Customary system.

Measurement Systems: Perform arithmetic operations with measurements of weight, capacity, length, and time.

Measurement Systems: Convert between Fahrenheit and Celsius temperature scales.

Measurement Systems: Convert measurements within the Metric measurement system.

Measurement Systems: Convert between the U.S. Customary system and the Metric system.

Applications to Food Service Professions: Calculate the most economical purchase, total cost, total hourly wages, and salaries.

Applications to Food Service Professions: Solve application problems related to portion size, cost per serving, number of portions, amount to order, and yield percents.

Applications to Food Service Professions: Solve application problems such as recipe conversions, recipe yields, and baker's percentage.

Applications to Food Service Professions: Solve application problems such as recipe conversions, extension costs, "As Purchased" (AP) and "Edible Portion" (EP) amounts and costs, recipe yield, and labor costs.

Applications to Food Service Professions: Solve application problems such as menu pricing, food costs, labor costs, and percents.

Applications to Food Service Professions: Calculate inventory, associated food costs, and food cost percentages.

Applications to Food Service Professions: Prepare and answer questions related to requisitions, invoices, and purchase orders.

Applications to Food Service Professions: Prepare and answer questions related to production reports.

Applications to Food Service Professions: Calculate beverage quantities and percentages.

Applications to Food Service Professions: Calculate customer checks, compute tax and gratuities, determine covers, write checks, and reconcile banking statements.

Applications to Food Service Professions: Calculate payroll, profits, and losses.

Descriptive Statistical Measures: Compute and interpret the meaning of simple descriptive statistical measures.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement

- All students are required to complete a comprehensive final examination that assesses the learning of all course objectives. This final examination must be weighted in a manner so that this exam score is worth a minimum of twenty percent (20%) of the student's final course grade. In selected semesters this final exam may be a common final exam administered to all sections of MATH104 Math for Food Service Careers
- All students will be required to complete at least two (2) proctored on-campus exams. The cumulative value of these exams must be at least forty percent (40%) of a student's final course grade.
- Additional assessment of student achievement may include assignments, quizzes, and exams.
- *Attendance* is defined as presence. While regular engagement is critical for student success, no grade-bearing credit shall be awarded solely for attendance.
- *Participation* (also referred to as engagement) is defined as the completion of an academic activity. To ensure that course grades continue to primarily reflect activities that lead to or demonstrate mastery of the mathematics curriculum, participation may account for no more than 10% of the overall course grade in all Mathematics Department courses.
- Application problems must be included on all exams, including the final exam.

General Course Requirements and Recommendations

- Students must bring a non-graphing scientific calculator to all class sessions.
- Application problems must be covered in all mathematics courses. In any course outline, every section that includes application problems must be covered.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for MATH 104

MATH110 - Intermediate Algebra

Overview

Subject
Mathematics

Academic Department
Mathematics

School
Science, Tech, Engr & Math

Course Description
Covers solving linear, quadratic, rational, and square root equations; solving linear inequalities; an introduction to functions; graphs of linear and quadratic functions; polynomial and rational expressions; rational exponents; and radical expressions. Includes techniques of problem solving and applications. Credit cannot be earned for both MATH-1091, MATH-1092, MATH-1093, MATH-1094 and MATH-110. Requires a non-graphing scientific calculator and access to an online homework management system.

Course Pre-requisite(s)
MATH010 Algebra Skills with a grade of S OR MATH103 Technical Mathematics with a C grade or better OR a satisfactory score on the Math placement test OR eligible to take gateway MATH courses at HFC

Credit Hours
4

Total Contact Hours
Total Instructor Contact Hours:
62

Total Student Contact Hours:
62

Course Fee
10

Academic Level
Undergraduate

General Education Category
Mathematics

Michigan Transfer Agreement (MTA) Category
Category 3: Mathematics - Applied Degrees

Goals, Topics, and Objectives

Course Goals

1. To develop in students intermediate algebraic skills necessary for success in subsequent mathematics courses and other courses requiring mathematical skills.
2. To develop in students the problem-solving skills needed to interpret, analyze and solve applied problems requiring intermediate-level algebraic skills.

Core Course Topics

1. Solve Linear Equations and Inequalities
    1. Solve linear equations using both the multiplication and addition properties of equality.
    2. Solve a linear equation containing fractions, decimals, parentheses, or all of these.
    3. Solve linear inequalities using the multiplication and addition properties of inequality.
    4. Express the solution of a linear inequality as an inequality, on a number line, in interval notation, and in set-builder notation.
2. Functions and Graphs
    1. Find the slope of a line given two points on a line.
    2. Write the equation of a line in slope-intercept form.
    3. Find the slope of a line given its equation.
    4. Graph a linear equation using the slope and y-intercept.
    5. Write equations of lines using slope-intercept form and point-slope form, including parallel and perpendicular lines.
    6. Define a relation and express the domain and range of a relation in set builder or interval notation.
    7. Determine algebraically or graphically whether a relation is a function.
    8. Use function notation.
    9. Solve application problems that can be modeled by a linear function.
3. Polynomial Functions
    1. Add, subtract, and multiply polynomials.
    2. Multiply binomial squares and the sum and difference of two terms.
    3. Factor polynomials by factoring out the greatest common factor.
    4. Factor four-term polynomials by grouping.
    5. Factor trinomials.
    6. Factor perfect-square trinomials and the difference of two squares.
    7. Apply the appropriate factoring strategy to factor a polynomial.
    8. Solve quadratic equations by factoring.
    9. Solve application problems that can be modeled by quadratic equations.
4. Rational Expressions and Rational Equations
    1. Simplify rational expressions.
    2. Determine the domain of a rational function.
    3. Perform algebraic operations of addition, subtraction, multiplication, and division on rational expressions.
    4. Simplify complex fractions.
    5. Solve rational equations algebraically.
    6. Solve rational equations for a specified variable.
    7. Solve application problems that can be modeled by rational equations.
5. Radicals, Rational Exponents, and Complex Numbers
    1. Evaluate perfect roots.
    2. Convert expressions in radical form to exponential form and vice versa.
    3. Simplify expressions involving rational exponents.
    4. Simplify radical expressions.
    5. Perform algebraic operations of addition, subtraction, and multiplication on radical expressions.
    6. Rationalize the denominator of a radical expression.
    7. Solve radical equations algebraically.
    8. Solve application problems that can be modeled by using Pythagorean Theorem.
    9. Write square roots with negative radicands as imaginary numbers.
    10. Add, subtract, multiply, and divide with complex numbers.
6. Quadratic Functions and Equations
    1. Solve quadratic equations using the square root property.
    2. Solve quadratic equations using the quadratic formula.

Solve Linear Equations and Inequalities: Solve linear equations using both the multiplication and addition properties of equality.

Solve Linear Equations and Inequalities: Solve a linear equation containing fractions, decimals, parentheses, or all of these.

Solve Linear Equations and Inequalities: Solve linear inequalities using the multiplication and addition properties of inequality.

Solve Linear Equations and Inequalities: Express the solution of a linear inequality as an inequality, on a number line, in interval notation, and in set-builder notation.

Functions and Graphs: Find the slope of a line given two points on a line.

Functions and Graphs: Write the equation of a line in slope-intercept form.

Functions and Graphs: Find the slope of a line given its equation.

Functions and Graphs: Graph a linear equation using the slope and y-intercept.

Functions and Graphs: Write equations of lines using slope-intercept form and point-slope form, including parallel and perpendicular lines.

Functions and Graphs: Define a relation and express the domain and range of a relation in set builder or interval notation.

Functions and Graphs: Determine algebraically or graphically whether a relation is a function.

Functions and Graphs: Use function notation.

Functions and Graphs: Solve application problems that can be modeled by a linear function.

Polynomial Functions: Add, subtract, and multiply polynomials.

Polynomial Functions: Add, subtract, and multiply polynomials.

Polynomial Functions: Factor polynomials by factoring out the greatest common factor.

Polynomial Functions: Factor four-term polynomials by grouping.

Polynomial Functions: Factor trinomials.

Polynomial Functions: Factor perfect-square trinomials and the difference of two squares.

Polynomial Functions: Apply the appropriate factoring strategy to factor a polynomial.

Polynomial Functions: Solve quadratic equations by factoring.

Polynomial Functions: Solve application problems that can be modeled by quadratic equations.

Rational Expressions and Rational Equations: Simplify rational expressions.

Rational Expressions and Rational Equations: Determine the domain of a rational function.

Rational Expressions and Rational Equations: Perform algebraic operations of addition, subtraction, multiplication, and division on rational expressions.

Rational Expressions and Rational Equations: Simplify complex fractions.

Rational Expressions and Rational Equations: Solve rational equations algebraically.

Rational Expressions and Rational Equations: Solve rational equations for a specified variable.

Rational Expressions and Rational Equations: Solve application problems that can be modeled by rational equations.

Radicals, Rational Exponents, and Complex Numbers: Evaluate perfect roots.

Radicals, Rational Exponents, and Complex Numbers: Convert expressions in radical form to exponential form and vice versa.

Radicals, Rational Exponents, and Complex Numbers: Simplify expressions involving rational exponents.

Radicals, Rational Exponents, and Complex Numbers: Simplify radical expressions.

Radicals, Rational Exponents, and Complex Numbers: Perform algebraic operations of addition, subtraction, and multiplication on radical expressions.

Radicals, Rational Exponents, and Complex Numbers: Rationalize the denominator of a radical expression.

Radicals, Rational Exponents, and Complex Numbers: Solve radical equations algebraically.

Radicals, Rational Exponents, and Complex Numbers: Solve application problems that can be modeled by using Pythagorean Theorem.

Radicals, Rational Exponents, and Complex Numbers: Write square roots with negative radicands as imaginary numbers.

Radicals, Rational Exponents, and Complex Numbers: Add, subtract, multiply, and divide with complex numbers.

Quadratic Functions and Equations: Solve quadratic equations using the square root property.

Quadratic Functions and Equations: Solve quadratic equations using the quadratic formula.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement

- All students will be required to complete a comprehensive final examination that assesses the learning of all course objectives.
- This final exam must be weighted in a manner so that this exam score is worth a minimum of twenty percent (20%) of the final course grade. In selected semesters this final exam may be a common final exam administered to all sections of MATH110 Intermediate Algebra.
- All students will be required to complete online homework. This online homework must be weighted in such a manner so that it is worth between six percent (6%) and twelve percent (12%) of the final course grade.
- Additional assessment of student achievement may include assignments, quizzes, and exams. All major exams should be designed in such a manner so that there is some portion in which graphing calculators are NOT allowed. Students may only use a non-graphing scientific calculator in this course.
- *Attendance* is defined as presence. While regular engagement is critical for student success, no grade-bearing credit shall be awarded solely for attendance.
- *Participation* (also referred to as engagement) is defined as the completion of an academic activity. To ensure that course grades continue to primarily reflect activities that lead to or demonstrate mastery of the mathematics curriculum, participation may account for no more than 10% of the overall course grade in all Mathematics Department courses.

General Course Requirements and Recommendations

- Students must bring a scientific calculator to all class sessions.
- Access to an online homework management system is also required.
- Application problems must be covered in all mathematics courses. Every section in any course outline that includes application problems must be covered. Application problems must not only be included on chapter exams but also on the final exam.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for MATH 110

MATH112 - Trigonometry

Overview

Subject
Mathematics

Academic Department
Mathematics

School
Science, Tech, Engr & Math

Course Description
For students in a technical or science program that requires knowledge of trigonometry. Topics include angles, right triangle trigonometry, circular functions and their graphs, trigonometric identities and equations, the Laws of Sines and Cosines, vectors, and a variety of physical applications. Course does not satisfy the MATH-175 or MATH-180 prerequisite. Requires a non-graphing scientific calculator for formal assessments and access to an online homework management system.

Course Pre-requisite(s)
MATH103 Technical Mathematics OR MATH-094 OR MATH110 Intermediate Algebra with a C grade or better OR a satisfactory score on the Math placement test.

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
10

Academic Level
Undergraduate

General Education Category
Mathematics

Michigan Transfer Agreement (MTA) Category
Category 3: Mathematics - Applied Degrees

Goals, Topics, and Objectives

Course Goals

1. To develop an understanding of
   a) trigonometry of angles,
   b) trigonometry of triangles, and
   c) trigonometry of functions.
2. To develop skills in
   a) solving triangles,
   b) proving trigonometric identities, and
   c) solving trigonometric equations.
3. To develop familiarity with mathematical and physical applications of trigonometry.
4. To develop skills in the use of non-graphing scientific calculators with respect to trigonometric values.

Core Course Topics

1. Angles
   1. Find the complement and the supplement of an angle.
   2. Calculate and convert angle degrees, minutes, and seconds.
   3. Find measures of co-terminal angles.
   4. Use geometric properties which apply to angles.
   5. Solve applied problems.
2. Basic Trigonometric Functions
   1. Define the six trigonometric functions.
   2. Define and use reciprocal identities.
   3. Define and use Pythagorean identities.
   4. Define and use quotient identities.
   5. Identify signs, domains, and ranges for trigonometric functions.
3. Right Triangle Trigonometry
   1. Define the six trigonometric functions based on right triangle trigonometry.
   2. Write trigonometric functions in terms of cofunctions.
   3. Find reference angles and use them to find exact trigonometric function values.
   4. Find trigonometric function values using a non-graphing scientific calculator.
   5. Solve applied problems using right triangles.
4. Unit Circle
   1. Convert between degree and radian angle measures.
   2. Find arc length and area of a sector for circles.
   3. Draw and use the unit circle to find exact trigonometric function values.
   4. Find linear and angular speed.
5. Graphs of the Trigonometric Functions
   1. Graph sine and cosine functions.
   2. Graph vertical and horizontal translations, expansions, and contractions for the sine and cosine functions.
   3. Graph tangent and cotangent functions.
   4. Graph secant and cosecant functions.
6. Trigonometric Identities
   1. Verify trigonometric identities using fundamental identities.
   2. Verify trigonometric identities using sum and difference identities.
   3. Verify trigonometric identities using double- and half-angle identities.
7. Inverse Trigonometric Functions

   a. Define inverse trigonometric functions for sine, cosine, and tangent.

   b. Find inverse trigonometric function values for sine, cosine, and tangent.

   c. Solve applied problems.
8. Trigonometric Equations
   1. Solve trigonometric equations using algebraic and trigonometric methods.
   2. Solve applied problems.
9. Oblique Triangle Trigonometry
   1. Use the Law of Sines.
   2. Use the Law of Cosines.
   3. Solve applied problems.

10. Vectors
    1. Interpret vectors algebraically.
    2. Perform vector operations.
    3. Solve applied problems.

Angles: Find the complement and the supplement of an angle.

Angles: Calculate and convert angle degrees, minutes, and seconds.

Angles: Find measures of co-terminal angles.

Angles: Use geometric properties which apply to angles.

Angles: Solve applied problems.

Basic Trigonometric Functions: Define the six trigonometric functions.

Basic Trigonometric Functions: Define and use reciprocal identities.

Basic Trigonometric Functions: Define and use Pythagorean identities.

Basic Trigonometric Functions: Define and use quotient identities.

Basic Trigonometric Functions: Identify signs, domains, and ranges for trigonometric functions.

Right Triangle Trigonometry: Define the six trigonometric functions based on right triangle trigonometry.

Right Triangle Trigonometry: Write trigonometric functions in terms of cofunctions.

Right Triangle Trigonometry: Find reference angles and use them to find exact trigonometric function values.

Right Triangle Trigonometry: Find trigonometric function values using a non-graphing scientific calculator.

Right Triangle Trigonometry: Solve applied problems using right triangles.

Unit Circle: Convert between degree and radian angle measures.

Unit Circle: Find arc length and area of a sector for circles.

Unit Circle: Draw and use the unit circle to find exact trigonometric function values.

Unit Circle: Find linear and angular speed.

Graphs of the Trigonometric Functions: Graph sine and cosine functions.

Graphs of the Trigonometric Functions: Graph vertical and horizontal translations, expansions, and contractions for the sine and cosine functions.

Graphs of the Trigonometric Functions: Graph tangent and cotangent functions.

Graphs of the Trigonometric Functions: Graph secant and cosecant functions.

Trigonometric Identities: Verify trigonometric identities using fundamental identities.

Trigonometric Identities: Verify trigonometric identities using sum and difference identities.

Trigonometric Identities: Verify trigonometric identities using double- and half-angle identities.

Inverse Trigonometric Functions: Define inverse trigonometric functions for sine, cosine, and tangent.

Inverse Trigonometric Functions: Find inverse trigonometric function values for sine, cosine, and tangent.

Inverse Trigonometric Functions: Solve applied problems.

Trigonometric Equations: Solve trigonometric equations using algebraic and trigonometric methods.

Trigonometric Equations: Solve applied problems.

Oblique Triangle Trigonometry: Use the Law of Sines.

Oblique Triangle Trigonometry: Use the Law of Cosines.

Oblique Triangle Trigonometry: Solve applied problems.

Vectors: Interpret vectors algebraically.

Vectors: Perform vector operations.

Vectors: Solve applied problems.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement

- All students are required to complete a comprehensive final examination that assesses the learning of all course objectives. This final examination must be weighted in a manner so that this exam score is worth a minimum of twenty percent (20%) of the student's final course grade. In selected semesters this final exam may be a common final exam administered to all sections of MATH112 Trigonometry.
- All students will be required to complete at least two (2) proctored on-campus exams. The cumulative value of these exams must be at least forty percent (40%) of a student's final course grade.
- For proctored in-person formal assessments (quizzes, tests, and exams) the only technology students can use is a non-graphing scientific calculator. Quizzes, tests, and exams may have non-calculator parts. Class projects and informal assessments will require students to use a free graphing application to support learning.
- Additional assessment of student achievement may include assignments, quizzes, and exams.
- Application problems must be included on all exams, including the final exam.
- *Attendance* is defined as presence. While regular engagement is critical for student success, no grade-bearing credit shall be awarded solely for attendance.
- *Participation* (also referred to as engagement) is defined as the completion of an academic activity. To ensure that course grades continue to primarily reflect activities that lead to or demonstrate mastery of the mathematics curriculum, participation may account for no more than 10% of the overall course grade in all Mathematics Department courses.
- All students will be required to complete online homework. This online homework must be weighted in such a manner so that it is worth between six percent (6%) and twelve percent (12%) of the final course grade.

General Course Requirements and Recommendations

- A non-graphing scientific calculator is required for formal assessments.
- Free graphing applications may be used to support learning for informal assessments and class work.
- Access to an online homework management system is required.
- Application problems must be covered in all mathematics courses. In any course outline, every section that includes application problems must be covered.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for MATH 112

MATH115 - College Algebra

Overview

Subject
Mathematics

Academic Department
Mathematics

School
Science, Tech, Engr & Math

Course Description
Covers analytic geometry, functions and their graphs, algebraic and graphical solutions of equations and inequalities, graphs and zeros of polynomial functions, conic sections, linear and polynomial modeling, systems of equations and inequalities, sequences and series, and the Binomial Theorem. Techniques of problem-solving and applications are included throughout the course requiring the frequent usage of graphing utilities. Requires a non-graphing scientific calculator for some formal assessments and access to an online homework system.

Course Pre-requisite(s)
MATH110 Intermediate Algebra with a grade of C or better OR a satisfactory score on the placement test.

Credit Hours
5

Total Contact Hours
Total Instructor Contact Hours:
77

Total Student Contact Hours:
77

Course Fee
10

Academic Level
Undergraduate

General Education Category
Mathematics

Michigan Transfer Agreement (MTA) Category
Category 3: Mathematics - Transfer Degrees - College Algebra Track, Category 3: Mathematics - Applied Degrees

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other Exam

Credit for Prior College Level Learning (CPCLL) Details
Other Exam Details

At least a 50, CLEP College Algebra exam, taken at any certified Testing Center.

Other Details

A student may receive credit for Math-115 by earning a minimum score of 50 on the CLEP College Algebra exam.

Goals, Topics, and Objectives

Course Goals
1. To develop the advanced algebraic skills needed in college-level science and mathematics courses.
2. To provide an introduction to functions.
3. To develop familiarity with some mathematical and physical applications of advanced algebra and analytic geometry.
4. To incorporate graphing utility whenever appropriate to illustrate concepts and solve problems.
5. To develop in students the problem-solving skills needed to interpret, analyze, and solve applied problems requiring college-level algebraic skills.

Core Course Topics

1. Solution of Equations and Inequalities
    1. Solve linear equations and linear inequalities in one variable algebraically and graphically.
    2. Solve quadratic equations and inequalities algebraically and graphically.
    3. Solve rational equations and inequalities algebraically and graphically.
    4. Solve radical equations algebraically and graphically.
    5. Solve absolute value equations and inequalities algebraically and graphically.
    6. Solve polynomial equations and inequalities algebraically and graphically.
2. Characteristics of Functions and their Graphs
    1. Determine if an equation, graph, or table of values represents a function, and state the domain and range of the function.
    2. Determine graphically and algebraically whether a function is even, odd, or neither.
    3. Determine graphically if a function is increasing, decreasing, or constant.
    4. Determine the location of maxima and minima using a graphing utility.
3. Basic functions and their transformations.
    1. Graph identity, constant, square, cubic, square root, cube root, absolute value, reciprocal functions of the form 1/x and 1/(x squared), and piecewise-defined functions by hand, and check using the graphing utility.
    2. Analyze and graph functions in terms of translations, reflections, and expansions or contractions.
    3. Determine the graph of a function obtained from a series of transformations.
4. Operations on Functions
    1. Find the sum, difference, product, quotient, and composition of two functions and their domains given their equations or graphs.
    2. Evaluate composite functions.
    3. Find and simplify the difference quotient of a function.
5. Linear Functions and their Graphs
    1. Graph linear functions by hand, and check using a graphing utility.
    2. Find the intercepts of a linear function algebraically and graphically.
    3. Determine the slope of a line joining two points in the plane, and determine the slope of a line given its equation.
    4. Produce a graph of a linear function by using slope and a point on a line.
    5. Write equations of lines satisfying specified sets of conditions.
    6. Write equations of parallel and perpendicular lines satisfying specified sets of conditions.
    7. Estimate the equation of the line of best fit for a set of bivariate data algebraically and by using a regression program in a graphing utility.
    8. Solve applied problems involving the line of best fit for a set of bivariate data.
6. Quadratic Functions and their Graphs
    1. Graph quadratic functions by hand and check using a graphing utility.
    2. Find the intercepts of quadratic functions algebraically and graphically.
    3. Identify the vertex and axis of symmetry of a quadratic function both algebraically and graphically (sketch by hand and by using a graphing utility).
    4. Convert the standard form of a quadratic function into vertex form.
    5. Determine the maximum or minimum value of a quadratic function both algebraically and by using a graphing utility.
    6. Solve applied maximum and minimum problems both algebraically and by using a graphing utility.
    7. Determine a quadratic model for a given set of data using a graphing utility.
7. Quadratic Equations and Inequalities
    1. Solve quadratic equations algebraically using factoring, the square root property, completing the square, and the quadratic formula, and verify solutions graphically.
    2. Perform basic arithmetic operations on complex numbers, and solve quadratic equations with complex solutions.
    3. Determine the number and type of solutions to a quadratic equation using the discriminant.
    4. Solve equations that are quadratic in form algebraically and verify solutions using a graphing utility.
    5. Solve inequalities involving quadratic functions algebraically, and verify solutions using a graphing utility.
8. Polynomial Functions and their Graphs
    1. Determine algebraically the intercepts of a polynomial function, and verify graphically.
    2. Determine a polynomial function's intercepts, extreme values, turning points, and intervals of increase and decrease by using a graphing utility.
    3. Determine the end behavior of a polynomial function using the degree of the polynomial and its leading coefficient.
    4. Construct a polynomial function with specified zeros.
9. Polynomial Equations and Inequalities
    1. Test factors for polynomial functions by using the Remainder and Factor Theorems, and factor polynomial functions to find the real zeros.
    2. Solve polynomial equations by using the Rational Zeros Theorem and synthetic division in conjunction with a graphing utility.
    3. Find the complex solutions of polynomial equations.
    4. Solve polynomial inequalities algebraically and graphically.
10. Analytic Geometry and Conic Sections
    1. Find the distance between two points in the coordinate plane by means of the distance formula, and find the midpoint of the segment joining the points.
    2. Complete the square to write equations of circles and parabolas, vertical and horizontal, in standard form.
    3. Determine the center and radius from the equation of the circle, and use these to sketch its graph by hand.
    4. Write the equation of a circle satisfying a set of specified conditions.
    5. Determine the vertex from the equation of a parabola, and use transformations to sketch its graph.
    6. Write the equation of a parabola given its vertex and another point.
11. Systems of Equations and Inequalities
    1. Solve 2 x 2 and 3 x 3 systems of linear equations by the methods of substitution and elimination.
    2. Classify systems of equations as inconsistent, consistent, or dependent, and represent solutions of dependent systems.
    3. Solve applied problems by using a system of linear equations.
    4. Solve linear and nonlinear two-variable systems of inequalities graphically.
    5. Solve systems of nonlinear equations graphically and algebraically.
12. Sequences and Series
    1. Write terms of a sequence given its general term.
    2. Write the terms of a sequence using a recursive definition.
    3. Determine if a sequence is arithmetic, geometric, or neither. (Optional)
    4. Given an arithmetic or geometric sequence of terms, write a general formula for the *n*th term of the sequence. (Optional)
    5. Expand a sum of terms represented by summation notation, and express a finite sum in terms summation notation. (Optional)
    6. Find the sum of a finite number of terms of a sequence using properties of sequences, and, in particular, find finite sums of arithmetic and geometric sequences. (Optional)
    7. Find the sum of a geometric series if it exists. (Optional)
    8. Expand powers of binomials.

Solution of Equations and Inequalities: Solve linear equations and linear inequalities in one variable algebraically and graphically.

Solution of Equations and Inequalities: Solve quadratic equations and inequalities algebraically and graphically.

Solution of Equations and Inequalities: Solve rational equations and inequalities algebraically and graphically.

Solution of Equations and Inequalities: Solve radical equations algebraically and graphically.

Solution of Equations and Inequalities: Solve absolute value equations and inequalities algebraically and graphically.

Solution of Equations and Inequalities: Solve polynomial equations and inequalities algebraically and graphically.

Characteristics of Functions and Their Graphs: Determine if an equation, graph, or table of values represents a function, and state the domain and range of the function.

Characteristics of Functions and Their Graphs: Determine graphically and algebraically whether a function is even, odd, or neither.

Characteristics of Functions and Their Graphs: Determine graphically if a function is increasing, decreasing, or constant.

Characteristics of Functions and Their Graphs: Determine the location of maxima and minima using a graphing utility.

Basic Functions and Their Transformations: Graph identity, constant, square, cubic, square root, cube root, absolute value, reciprocal functions of the form 1/x and 1/(x squared), and piecewise-defined functions by hand, and check using the graphing utility.

Basic Functions and Their Transformations: Analyze and graph functions in terms of translations, reflections, and expansions or contractions.

Basic Functions and Their Transformations: Determine the graph of a function obtained from a series of transformations.

Operations on Functions: Find the sum, difference, product, quotient, and composition of two functions and their domains given their equations or graphs.

Operations on Functions: Evaluate composite functions.

Operations on Functions: Find and simplify the difference quotient of a function.

Linear Functions and Their Graphs: Graph linear functions by hand, and check using a graphing utility.

Linear Functions and Their Graphs: Find the intercepts of a linear function algebraically and graphically.

Linear Functions and Their Graphs: Determine the slope of a line joining two points in the plane, and determine the slope of a line given its equation.

Linear Functions and Their Graphs: Produce a graph of a linear function by using slope and a point on a line.

Linear Functions and Their Graphs: Write equations of lines satisfying specified sets of conditions.

Linear Functions and Their Graphs: Write equations of parallel and perpendicular lines satisfying specified sets of conditions.

Linear Functions and Their Graphs: Estimate the equation of the line of best fit for a set of bivariate data algebraically and by using a regression program in a graphing utility.

Linear Functions and Their Graphs: Solve applied problems involving the line of best fit for a set of bivariate data.

Quadratic Functions and Their Graphs: Graph quadratic functions by hand and check using a graphing utility.

Quadratic Functions and Their Graphs: Find the intercepts of quadratic functions algebraically and graphically.

Quadratic Functions and their Graphs: Identify the vertex and axis of symmetry of a quadratic function both algebraically and graphically (sketch by hand and by using a graphing utility).

Quadratic Functions and their Graphs: Convert the standard form of a quadratic function into vertex form.

Quadratic Functions and Their Graphs: Determine the maximum or minimum value of a quadratic function both algebraically and by using a graphing utility.

Quadratic Functions and Their Graphs: Solve applied maximum and minimum problems both algebraically and by using a graphing utility.

Quadratic Functions and Their Graphs: Determine a quadratic model for a given set of data using a graphing utility.

Quadratic Equations and Inequalities: Solve quadratic equations algebraically using factoring, the square root property, completing the square, and the quadratic formula, and verify solutions graphically.

Quadratic Equations and Inequalities: Perform basic arithmetic operations on complex numbers, and solve quadratic equations with complex solutions.

Quadratic Equations and Inequalities: Determine the number and type of solutions to a quadratic equation using the discriminant.

Quadratic Equations and Inequalities: Solve equations that are quadratic in form algebraically, and verify solutions using a graphing utility.

Quadratic Equations and Inequalities: Solve inequalities involving quadratic functions algebraically, and verify solutions using a graphing utility.

Polynomial Functions and Their Graphs: Determine algebraically the intercepts of a polynomial function, and verify graphically.

Polynomial Functions and Their Graphs: Determine a polynomial function's intercepts, extreme values, turning points, and intervals of increase and decrease by using a graphing utility.

Polynomial Functions and Their Graphs: Determine the end behavior of a polynomial function using the degree of the polynomial and its leading coefficient.

Polynomial Functions and Their Graphs: Construct a polynomial function with specified zeros.

Polynomial Equations and Inequalities: Test factors for polynomial functions by using the Remainder and Factor Theorems, and factor polynomial functions to find the real zeros.

Polynomial Equations and Inequalities: Solve polynomial equations by using the Rational Zeros Theorem and synthetic division in conjunction with a graphing utility.

Polynomial Equations and Inequalities: Find the complex solutions of polynomial equations.

Polynomial Equations and Inequalities: Solve polynomial inequalities algebraically and graphically.

Analytic Geometry and Conic Sections: Find the distance between two points in the coordinate plane by means of the distance formula, and find the midpoint of the segment joining the points.

Analytic Geometry and Conic Sections: Complete the square to write equations of circles and parabolas, vertical and horizontal, in standard form.

Analytic Geometry and Conic Sections: Determine the center and radius from the equation of the circle, and use these to sketch its graph by hand.

Analytic Geometry and Conic Sections: Write the equation of a circle satisfying a set of specified conditions.

Analytic Geometry and Conic Sections: Determine the vertex from the equation of a parabola, and use transformations to sketch its graph.

Analytic Geometry and Conic Sections: Write the equation of a parabola given its vertex and another point.

Systems of Equations and Inequalities: Solve 2 x 2 and 3 x 3 systems of linear equations by the methods of substitution and elimination.

Systems of Equations and Inequalities: Classify systems of equations as inconsistent, consistent, or dependent, and represent solutions of dependent systems.

Systems of Equations and Inequalities: Solve applied problems by using a system of linear equations.

Systems of Equations and Inequalities: Solve linear and nonlinear two-variable systems of inequalities graphically.

Systems of Equations and Inequalities: Solve systems of nonlinear equations graphically and algebraically.

Sequences and Series: Write terms of a sequence given its general term.

Sequences and Series: Write the terms of a sequence using a recursive definition.

Sequences and Series: Determine if a sequence is arithmetic, geometric, or neither. (Optional)

Sequences and Series: Given an arithmetic or geometric sequence of terms, write a general formula for the nth term of the sequence. (Optional)

Sequences and Series: Expand a sum of terms represented by summation notation, and express a finite sum in terms summation notation. (Optional)

Sequences and Series: Find the sum of a finite number of terms of a sequence using properties of sequences, and, in particular, find finite sums of arithmetic and geometric sequences. (Optional)

Sequences and Series: Find the sum of a geometric series if it exists. (Optional)

Sequences and Series: Expand powers of binomials.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement

- All students will be required to complete a comprehensive final examination that assesses the learning of all course objectives. This final exam must be weighted in a manner so that this exam score is worth a minimum of twenty percent (20%) of the final course grade. In selected semesters this final exam may be a common final exam administered to all sections of MATH115 College Algebra.
- All students will be required to complete at least two proctored on-campus exams. The cumulative value of those exams must be at least 40% of a student's final grade.
- All students will be required to complete online homework. This online homework must be weighted in such a manner so that it is worth between six percent (6%) and twelve percent (12%) of the final course grade.
- Additional assessment of student achievement may include assignments, projects, quizzes, and exams.
- *Attendance* is defined as presence. While regular engagement is critical for student success, no grade-bearing credit shall be awarded solely for attendance.
- *Participation* (also referred to as engagement) is defined as the completion of an academic activity. To ensure that course grades continue to primarily reflect activities that lead to or demonstrate mastery of the mathematics curriculum, participation may account for no more than 10% of the overall course grade in all Mathematics Department courses.
- For proctored in-person formal assessments (quizzes, tests, and exams) the only technology students can use is a non-graphing scientific calculator. Quizzes, tests, and exams may have non-calculator parts. Class projects and informal assessments will require students to use a free graphing application to support learning.
- All relevant application problems must be assessed throughout the semester. Application problems must be included in the final exam.

General Course Requirements and Recommendations

- A non-graphing scientific calculator is required for formal assessments.
- Free graphing applications may be used to support learning for informal assessments and class work.
- Access to an online homework management system is also required.
- Application problems must be covered in all mathematics courses. Every section in any course outline that includes application problems must be covered.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for MATH 115

MATH122 - Mathematics for Elementary Teachers I

Overview

Subject
Mathematics

Academic Department
Mathematics

School
Science, Tech, Engr & Math

Course Description
For students who are involved in a curriculum for elementary teachers. Includes problem solving, set theory, number theory, numeration systems, whole numbers, and fractions. Addresses two aspects of teaching children mathematics - content and pedagogy - focused on Michigan Department of Education Standards for the Preparation of Teachers of Lower Elementary (Pre-K - 3) and Upper Elementary (Grades 3 - 6). Also addresses concept development, algorithms, children's mathematical work, and communication skills--both oral and written--important for teaching children.

Course Pre-requisite(s)
MATH110 Intermediate Algebra with a C grade or better OR a satisfactory score on the placement test

Course Co-requisite(s)
Enrollment in ENG131 Introduction College Writing or ENG131 Introduction College Writing with a C grade or better

Credit Hours
4

Total Contact Hours
Total Instructor Contact Hours:
77

Total Student Contact Hours:
77

Course Fee
10

Academic Level
Undergraduate

General Education Category
Mathematics

Michigan Transfer Agreement (MTA) Category
Category 3: Mathematics - Transfer Degrees - Quantitative Literacy Track, Category 3: Mathematics - Applied Degrees

Goals, Topics, and Objectives

Course Goals

1. To strengthen mathematical problem-solving skills pertaining to curricular topics related to the preparation of future elementary school teachers.
2. To strengthen communication skills, both written and oral, of mathematical ideas.
3. To strengthen mathematical competence in fundamental set theory and numeration systems that undergird
    1. Whole-number concepts and operations and
    2. Number theory fundamental to fraction operations.
4. To develop pedagogical skills consistent with MDE Core Teaching Practices that are used for teaching mathematics to children.

Core Course Topics

1. Michigan Department of Education Core Practices
    1. Demonstrate knowledge of leading a group discussion.
    2. Demonstrate knowledge of explaining and modeling content, practices and strategies.
    3. Demonstrate knowledge of eliciting and interpreting individual students' thinking.
    4. Demonstrate knowledge of implementing norms and routines for classroom discourse and work.
2. Problem Solving (MDE Standards: B-K M.9)
    1. Solve word problems using a variety of strategies.
    2. Solve word problems employing Polya's four-step process.
3. Numeration Systems (MDE B-K; M. 13, M.15. Pre-K – 3: M.9, M.10, M.11, M.12. Grades 3-6: M.5, M.6)
    1. Identify the characteristics of tally and place-value numeration systems.
    2. Give examples of tally and place-value numeration systems.
    3. Represent Base 5 numerals using a variety of manipulatives.
    4. Convert between Base 5 and Base 10 numeration systems.
    5. Add, subtract and multiply in Base 5 numeration system.
    6. Compose and decompose Base 10 numbers in a variety of ways.
    7. Use a variety of manipulatives to represent Base 10 numbers.
    8. State benefits and limitations of a variety of manipulatives.
4. Set Theory
    1. Define: set, subset, proper subset, null/empty set, element, universal set, complement of a set.
    2. Demonstrate knowledge of element and subset relationships.
    3. Perform operations on sets (union, intersection, complement).
    4. Demonstrate knowledge of properties of set operations (commutativity, associativity, distributivity, identity).
    5. Use Venn Diagrams to solve problems.
5. Whole Numbers and Their Operations (MDE B-K; M.13, M.14, M.15. MDE Pre-K-3. MDE Grades 3–6: M.5, M. 6., M.7, M.8)
    1. Use ordinal, cardinal, and nominal models to demonstrate whole numbers.
    2. Compare whole numbers and develop the meaning of <, > and = with whole numbers.
    3. Model and explain using manipulatives whole numbers operations.
    4. Demonstrate knowledge and understanding of the standard algorithms for whole number operations.
    5. Justify alternative algorithms for whole number operations.
    6. Make connections among whole number operation algorithms.
    7. Demonstrate proficiency in using estimation techniques for whole number operations.
    8. Demonstrate proficiency in mental mathematics for whole number operations.
    9. Demonstrate knowledge of the properties of whole number operations.
    10. Solve problems involving whole numbers.
    11. Respond to observations of children's mathematical work.
    12. Develop sets of problems with varying degrees of difficulty
6. Algebraic Reasoning (MDE B-K: M.10, M.11, M.12)
    1. Demonstrate an understanding of the concept of variable and apply this knowledge to problem solving.
    2. Demonstrate an understanding of equation solving and apply this knowledge to problem solving.
    3. Apply knowledge of functions represented in a variety of forms.
    4. Solve problems requiring equations in two variables.
7. Number Theory
    1. Define: the unit, prime number, composite number, even number, odd number, factor and multiple.
    2. Demonstrate an understanding of greatest common factor (GCF) using a variety of techniques.
    3. Demonstrate an understanding of least common multiple (LCM) using a variety of techniques.

4. Solve problems involving the concepts of GCF and LCM.

8. Fractions (MDE: Pre-K-3: M.13, M.14, M.15, M.16. Grades 3 – 6: M.9, M.10, M.11, M.12)
    1. Model fractions using a variety of manipulatives and hand-drawn methods.
    2. Develop meaning of fraction using a variety of mathematical concepts.
    3. Define fraction.
    4. Compare fractions and develop the meaning of <, >, and = with fractions.
    5. Model and explain fraction operations using manipulatives.
    6. Demonstrate knowledge and understanding of standard algorithms for fraction operations.
    7. Demonstrate proficiency in using estimation techniques for fraction operations.
    8. Demonstrate proficiency in mental mathematics for fraction operations.
    9. Demonstrate knowledge of the properties of fraction operations.
    10. Solve problems involving fractions.
    11. Observe and respond to children's mathematical work.
    12. Develop sets of problems with varying degrees of difficulty.

Michigan Department of Education Core Practices: Demonstrate knowledge of leading a group discussion.

Michigan Department of Education Core Practices: Demonstrate knowledge of explaining and modeling content, practices and strategies.

Michigan Department of Education Core Practices: Demonstrate knowledge of eliciting and interpreting individual students' thinking.

Michigan Department of Education Core Practices: Demonstrate knowledge of implementing norms and routines for classroom discourse and work.

Problem Solving: Solve word problems using a variety of strategies.

Problem Solving: Solve word problems employing Polya's four-step process.

Numeration Systems: Identify the characteristics of tally and place-value numeration systems.

Numeration Systems: Give examples of tally and place-value numeration systems.

Numeration Systems: Represent Base 5 numerals using a variety of manipulatives.

Numeration Systems: Convert between Base 5 and Base 10 numeration systems.

Numeration Systems: Add, subtract and multiply in Base 5 numeration system.

Numeration Systems: Compose and decompose Base 10 numbers in a variety of ways.

Numeration Systems: Use a variety of manipulatives to represent Base 10 numbers.

Numeration Systems: State benefits and limitations of a variety of manipulatives.

Set Theory: Define: set, subset, proper subset, null/empty set, element, universal set, complement of a set.

Set Theory: Demonstrate knowledge of element and subset relationships.

Set Theory: Perform operations on sets (union, intersection, complement).

Set Theory: Demonstrate knowledge of properties of set operations (commutativity, associativity, distributivity, identity).

Set Theory: Use Venn Diagrams to solve problems.

Whole Numbers and Their Operations: Use ordinal, cardinal, and nominal models to demonstrate whole numbers.

Whole Numbers and Their Operations: Compare whole numbers and develop the meaning of <, > and = with whole numbers.

Whole Numbers and Their Operations: Model and explain using manipulatives whole numbers operations.

Whole Numbers and Their Operations: Demonstrate knowledge and understanding of the standard algorithms for whole number operations.

Whole Numbers and Their Operations: Justify alternative algorithms for whole number operations.

Whole Numbers and Their Operations: Make connections among whole number operation algorithms.

Whole Numbers and Their Operations: Demonstrate proficiency in using estimation techniques for whole number operations.

Whole Numbers and Their Operations: Demonstrate proficiency in mental mathematics for whole number operations.

Whole Numbers and Their Operations: Demonstrate knowledge of the properties of whole number operations.

Whole Numbers and Their Operations: Solve problems involving whole numbers.

Whole Numbers and Their Operations: Respond to observations of children's mathematical work.

Whole Numbers and Their Operations: Develop sets of problems with varying degrees of difficulty.

Algebraic Reasoning: Demonstrate an understanding of the concept of variable and apply this knowledge to problem solving.

Algebraic Reasoning: Demonstrate an understanding of equation solving and apply this knowledge to problem solving.

Algebraic Reasoning: Apply knowledge of functions represented in a variety of forms.

Algebraic Reasoning: Solve problems requiring equations in two variables.

Number Theory: Define: the unit, prime number, composite number, even number, odd number, factor and multiple.

Number Theory: Demonstrate an understanding of greatest common factor (GCF) using a variety of techniques.

Number Theory: Demonstrate an understanding of least common multiple (LCM) using a variety of techniques.

Number Theory: Solve problems involving the concepts of GCF and LCM.

Fractions: Model fractions using a variety of manipulatives and hand-drawn methods.

Fractions: Develop meaning of fraction using a variety of mathematical concepts.

Fractions: Define fraction.

Fractions: Compare fractions and develop the meaning of <, >, and = with fractions.

Fractions: Model and explain fraction operations using manipulatives.

Fractions: Demonstrate knowledge and understanding of standard algorithms for fraction operations.

Fractions: Demonstrate proficiency in using estimation techniques for fraction operations.

Fractions: Demonstrate proficiency in mental mathematics for fraction operations.

Fractions: Demonstrate knowledge of the properties of fraction operations.

Fractions: Solve problems involving fractions.

Fractions: Observe and respond to children's mathematical work.

Fractions: Develop sets of problems with varying degrees of difficulty.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement

- Pre-Education students are required to create an e-portfolio as part of their academic work at HFC. Instructors must include a minimum of three e-portfolio assignments as part of course work. These assignments will be stored in each student's e-portfolio.
- All students will be required to complete online homework. This online homework must be weighted in such a manner so that it is worth between six percent (6%) and twelve percent (12%) of the final course grade.
- All students will be required to complete an arithmetic quiz (with no calculator) that is worth five percent (5%) of the final course grade.
- All students will be required to complete a comprehensive final examination that assesses the learning of all course objectives. This exam must be weighted in a manner so that this exam score is worth a minimum of fifteen percent (15%) of the final course grade. In selected semesters this exam may be a common exam administered to all sections of MATH122 Math for Elem Teachers I.
- All students will be required to complete journal assignments.
- Additional assessment of student achievement may include assignments, quizzes, and exams.
- Application problems must not only be included on chapter exams but also on the final exam.

General Course Requirements and Recommendations

- Application problems must be covered in all mathematics courses. Every section in any course outline that includes application problems must be covered.
- No calculator may be used in this course.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for MATH 122

MATH131 - Mathematics for the Modern World

Overview

Subject
Mathematics

Academic Department
Mathematics

School
Science, Tech, Engr & Math

Course Description
For students pursuing a liberal arts curriculum or a program without a specified mathematics requirement. Topics include numerical reasoning; personal finance; probability; statistics; geometry; and voting methods. Emphasizes techniques of problem-solving and application of modern mathematics to understanding quantitative information in the everyday world.

Course Pre-requisite(s)
(MATH010 Algebra Skills OR MATH031 Quantitative Reasoning Skills with a grade of S, MATH100 Basic Tech Mathematics or MATH101 Math for Health Career with a B- grade or better, MATH103 Technical Mathematics with a C grade or better, a satisfactory score on the Math placement test, OR eligible to take gateway MATH courses at HFC) AND Eligible to take ENG courses at HFC

Credit Hours
4

Total Contact Hours

Total Instructor Contact Hours:
62

Total Student Contact Hours:
62

Course Fee
10

Academic Level
Undergraduate

General Education Category
Mathematics

Michigan Transfer Agreement (MTA) Category
Category 3: Mathematics - Transfer Degrees - Quantitative Literacy Track, Category 3: Mathematics - Applied Degrees

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other Exam

Credit for Prior College Level Learning (CPCLL) Details
Other Exam Details

50, CLEP College Mathematics exam, taken at any certified Testing Center, such as HFC's Workforce & Professional Development's Testing Center (313) 317-6600.

Other Details

A student may receive credit for Math-131 by earning a minimum score of 50 on the CLEP College Mathematics exam.

Goals, Topics, and Objectives

Course Goals

1. To generate an appreciation of the quantitative tools that help to present and explain issues arising in the media and students' daily lives.
2. To heighten communication skills, both written and oral, of mathematical ideas so that students can express quantitative evidence in support of an argument or purpose of a work.
3. To increase the ability to explain information presented in mathematical forms such as equations, graphs, diagrams, tables, and paragraphs and to convert relevant information between the forms.
4. To strengthen the ability to make judgments and draw appropriate conclusions based on the quantitative analysis of data, while recognizing the limits of this analysis.
5. To enhance mathematical competence in performing appropriate calculations and communicating results in the specific areas of modeling, personal finance, basic statistics, and geometry.

Core Course Topics

1. Number Sense
    1. Solve problems involving rates and dimensional analysis
    2. Write numbers in scientific notation
    3. Solve application problems involving percentages
2. Financial Literacy
    1. Solve application problems involving interest, annuities, and loans
    2. Solve problems involving tax
3. Probability
    1. Count the possible outcomes for events
    2. Calculate probabilities
    3. Find expected values
    4. Distinguish between independent and dependent events
4. Statistics
    1. Find descriptive statistics
    2. Display data
    3. Analyze statistical studies and sampling methods
    4. Solve problems involving the normal distribution
5. Geometry
    1. Solve problems involving perimeter, area, surface area, and volume.
    2. Solve problems involving similar figures
    3. Solve problems involving right triangles
6. Voting Methods
    1. Determine the results of a vote using voting rules
    2. Determine how to allocate resources or goods using a given apportionment

Number Sense: Solve problems involving rates and dimensional analysis.

Number Sense: Write numbers in scientific notation.

Number Sense: Solve application problems involving percentages.

Financial Literacy: Solve application problems involving interest, annuities, and loans.

Financial Literacy: Solve problems involving tax.

Probability: Count the possible outcomes for events.

Probability: Calculate probabilities.

Probability: Find expected values.

Probability: Distinguish between independent and dependent events.

Statistics: Find descriptive statistics.

Statistics: Display data.

Statistics: Analyze statistical studies and sampling methods.

Statistics: Solve problems involving the normal distribution.

Geometry: Solve problems involving perimeter, area, surface area, and volume.

Geometry: Solve problems involving similar figures.

Geometry: Solve problems involving right triangles.

Voting Methods: Determine the results of a vote using voting rules.

Voting Methods: Determine how to allocate resources or goods using a given apportionment.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement

- All students will be required to complete a comprehensive final examination that assesses the learning of all course objectives. This exam must be weighted in a manner so that this exam score is worth a minimum of fifteen percent (20%) of the final course grade.
- Additional assessment of student achievement may include assignments, quizzes, and exams.
- *Attendance* is defined as presence. While regular engagement is critical for student success, no grade-bearing credit shall be awarded solely for attendance.
- *Participation* (also referred to as engagement) is defined as the completion of an academic activity. To ensure that course grades continue to primarily reflect activities that lead to or demonstrate mastery of the mathematics curriculum, participation may account for no more than 10% of the overall course grade in all Mathematics Department courses.
- Application problems must not only be included on chapter exams but also on the final exam.

General Course Requirements and Recommendations

- A scientific calculator is required of each student.
- Application problems must be covered in all mathematics courses. Every section of any course outline that includes application problems must be covered.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for MATH 131

MATH141 - Introduction to Statistics

Overview

Subject
Mathematics

Academic Department
Mathematics

School
Science, Tech, Engr & Math

Course Description
Designed as a first course for students in business administration, education, social sciences, engineering, and other fields in which data are collected and predictions are made. Covers descriptive measures, the summarizing of data, an introduction to probability, discrete probability distributions, normal probability distributions, sampling distributions, estimation, confidence intervals, hypothesis testing, correlation, regression, chi square tests, one-way analysis of variance (ANOVA), and use of nonparametric tests. In addition, utilizes a statistical software package to conduct data analysis and solve applied problems. Requires a graphing calculator, with the TI-84 Plus series recommended. Also requires access to an online homework management system as well as a statistical software package.

Course Pre-requisite(s)
MATH041 Intro Statistics Skills Review with a grade of S, MATH080 - Missing course or MATH-094 with a B- grade or better, MATH110 Intermediate Algebra or MATH-131 with a C grade or better, OR a satisfactory score on the placement test OR eligible to take gateway MATH courses at HFC

Credit Hours
4

Total Contact Hours
Total Instructor Contact Hours:
62

Total Student Contact Hours:
62

Course Fee
10

Academic Level
Undergraduate

General Education Category
Mathematics

Michigan Transfer Agreement (MTA) Category
Category 3: Mathematics - Applied Degrees, Category 3: Mathematics - Transfer Degrees - Statistics Track

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other Exam

Credit for Prior College Level Learning (CPCLL) Details
Other Exam Details

Minimum score of 3, Advanced Placement (AP) Statistics exam

Goals, Topics, and Objectives

Course Goals

1. To introduce students to the fundamental concepts of probability.
2. To present the basic techniques used in descriptive and inferential statistics.
3. To introduce students to the use of technology for data exploration and analysis.
4. To encourage students to communicate effectively in presenting the results of a statistical study. This may include (but not be limited to) emphasis on reading, problem solving, and writing skills throughout the course as they are needed in the practice of statistics.

Core Course Topics

1. Data Types
    1. Distinguish between a population and a sample, between a parameter and a statistic, and between descriptive and inferential statistics.
    2. Distinguish between qualitative data and quantitative data.
    3. Classify data with respect to the four levels of measurement.
    4. Identify the different types of sampling techniques.
2. Descriptive Statistics
    1. Construct frequency distributions, frequency histograms, frequency polygons, relative frequency histograms, stem-and-leaf, and box-and-whisker plots.
    2. Find and interpret the mean, median, and mode of a population and of a sample.
    3. Find and interpret the range, variance, and standard deviation of a population and of a sample.
    4. Interpret standard deviation by means of the Empirical Rule and Chebychev's theorem.
    5. Find and interpret quartiles, percentiles and interquartile range of data set.
    6. Find and interpret the standard score (z-score).
3. Probability
    1. Identify the sample space of a probability experiment and identify simple events.
    2. Distinguish between classical, empirical, and subjective types of probability.
    3. Distinguish between dependent and independent events.
    4. Determine if two events are mutually exclusive.
    5. Calculate probabilities through the use of the Complement Rule, the Multiplication Rule, and the Addition Rule.
4. Discrete Probability Distributions
    1. Distinguish between discrete random variables and continuous random variables.
    2. Construct a discrete probability distribution and its graph.
    3. Determine if a function is a probability distribution, and find the mean, standard deviation, and expected value of the distribution.
    4. Find binomial probabilities using the binomial probability formula.
    5. Find the mean and standard deviation of a binomial probability distribution.
5. Normal Probability Distributions
    1. Find probabilities for normal distributions using both tables and technology.
    2. Find specific data values of a normal distribution associated with a given probability using both tables and technology.
    3. Verify the properties of sampling distributions.
    4. Apply the Central Limit Theorem to find the probabilities associated with sample means.
6. Confidence Intervals
    1. Construct and interpret confidence intervals for a population mean using both small and large sample techniques by means of tables and technology.
    2. Construct and interpret confidence intervals for a population proportion by means of tables and technology.
    3. Construct and interpret confidence intervals for the difference of proportions or means for two populations.
    4. Determine the minimum sample size required when estimating the population mean and population proportion.
    5. Construct and interpret confidence intervals for the population variance and standard deviation by means of both tables and technology.
7. Hypothesis Testing Using a Simple Sample
    1. Conduct and present formal hypothesis tests involving the mean of a population using both small and large sample techniques.

2. Conduct and present formal hypothesis tests involving a population proportion.
3. Conduct and present formal hypothesis tests involving the standard deviation (or variance) of a population using a sample drawn from a normal population.

8. Hypothesis Testing with Two Samples
    1. Conduct and present a hypothesis test for the difference between two population means using techniques for large independent samples, small independent samples, and dependent samples.
    2. Conduct and present a hypothesis test for the difference between two population proportions.
9. Correlation and Regression
    1. Determine the coefficient of correlation for a sample of bivariate data by means of technology and interpret the value in the context of the data.
    2. Conduct and present a hypothesis test for the significance of a population correlation coefficient.
    3. Determine the equation of a regression line for bivariate data by means of technology and use the equation to make predictions.
    4. Determine the coefficient of determination for a sample of bivariate data by means of technology and interpret the value in the context of the data.
10. Chi-Square Tests and the F-Distribution
    1. Test whether a frequency distribution fits a claimed distribution through use of the chi-square distribution.
    2. Test whether two variables are independent by means of contingency tables and the chi-square distribution.
    3. Perform a two-sample F-test to compare two variances.
    4. Test claims involving three or more means through use of one-way-analysis of variance (ANOVA).
11. Nonparametric Tests
    1. Test a population median and the difference between two population medians through use of the nonparametric Sign Test.
    2. Determine if two samples (both independent and dependent) are selected from populations with the same distribution through use of the nonparametric Wilcoxon Tests.
    3. Determine if three or more samples were selected from populations with the same distribution through use of the Kruskal-Wallis Test.

Data Types: Distinguish between a population and a sample, between a parameter and a statistic, and between descriptive and inferential statistics.

Data Types: Distinguish between qualitative data and quantitative data.

Data Types: Classify data with respect to the four levels of measurement.

Data Types: Identify the different types of sampling techniques.

Descriptive Statistics: Construct frequency distributions, frequency histograms, frequency polygons, relative frequency histograms, stem-and-leaf, and box-and-whisker plots.

Descriptive Statistics: Find and interpret the mean, median, and mode of a population and of a sample.

Descriptive Statistics: Find and interpret the range, variance, and standard deviation of a population and of a sample.

Descriptive Statistics: Interpret standard deviation by means of the Empirical Rule and Chebychev's theorem.

Descriptive Statistics: Find and interpret quartiles, percentiles and interquartile range of data set.

Descriptive Statistics: Find and interpret the standard score (z-score).

Probability: Identify the sample space of a probability experiment and identify simple events.

Probability: Distinguish between classical, empirical, and subjective types of probability.

Probability: Distinguish between dependent and independent events.

Probability: Determine if two events are mutually exclusive.

Probability: Calculate probabilities through the use of the Complement Rule, the Multiplication Rule, and the Addition Rule.

Discrete Probability Distributions: Distinguish between discrete random variables and continuous random variables.

Discrete Probability Distributions: Construct a discrete probability distribution and its graph.

Discrete Probability Distributions: Determine if a function is a probability distribution, and find the mean, standard deviation, and expected value of the distribution.

Discrete Probability Distributions: Find binomial probabilities using the binomial probability formula.

Discrete Probability Distributions: Find the mean and standard deviation of a binomial probability distribution.

Normal Probability Distributions: Find probabilities for normal distributions using both tables and technology.

Normal Probability Distributions: Find specific data values of a normal distribution associated with a given probability using both tables and technology.

Normal Probability Distributions: Verify the properties of sampling distributions.

Normal Probability Distributions: Apply the Central Limit Theorem to find the probabilities associated with sample means.

Confidence Intervals: Construct and interpret confidence intervals for a population mean using both small and large sample techniques by means of tables and technology.

Confidence Intervals: Construct and interpret confidence intervals for a population proportion by means of tables and technology.

Confidence Intervals: Construct and interpret confidence intervals for the difference of proportions or means for two populations.

Confidence Intervals: Determine the minimum sample size required when estimating the population mean and population proportion.

Confidence Intervals: Construct and interpret confidence intervals for the population variance and standard deviation by means of both tables and technology.

Hypothesis Testing Using a Simple Sample: Conduct and present formal hypothesis tests involving the mean of a population using both small and large sample techniques.

Hypothesis Testing Using a Simple Sample: Conduct and present formal hypothesis tests involving a population proportion.

Hypothesis Testing Using a Simple Sample: Conduct and present formal hypothesis tests involving the standard deviation (or variance) of a population using a sample drawn from a normal population.

Hypothesis Testing with Two Samples: Conduct and present a hypothesis test for the difference between two population means using techniques for large independent samples, small independent samples, and dependent samples.

Hypothesis Testing with Two Samples: Conduct and present a hypothesis test for the difference between two population proportions.

Correlation and Regression: Determine the coefficient of correlation for a sample of bivariate data by means of technology and interpret the value in the context of the data.

Correlation and Regression: Conduct and present a hypothesis test for the significance of a population correlation coefficient.

Correlation and Regression: Determine the equation of a regression line for bivariate data by means of technology and use the equation to make predictions.

Correlation and Regression: Determine the coefficient of determination for a sample of bivariate data by means of technology and interpret the value in the context of the data.

Chi-Square Tests and the F-Distribution: Test whether a frequency distribution fits a claimed distribution through use of the chi-square distribution.

Chi-Square Tests and the F-Distribution: Test whether two variables are independent by means of contingency tables and the chi-square distribution.

Chi-Square Tests and the F-Distribution: Perform a two-sample F-test to compare two variances.

Chi-Square Tests and the F-Distribution: Test claims involving three or more means through use of one-way-analysis of variance (ANOVA).

Nonparametric Tests: Test a population median and the difference between two population medians through use of the nonparametric Sign Test.

Nonparametric Tests: Determine if two samples (both independent and dependent) are selected from populations with the same distribution through use of the nonparametric Wilcoxon Tests.

Nonparametric Tests: Determine if three or more samples were selected from populations with the same distribution through use of the Kruskal-Wallis Test.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement

- A comprehensive final examination, weighted in a manner that is worth at least (15%) of the final course grade, is required of all sections. In selected semesters this exam may be a common exam administered to all sections of MATH141 Introduction to Statistics.
- All students will be required to complete online homework. This online homework must be weighted in such a manner so that it is worth between six percent (6%) and twelve percent (12%) of the final course grade.
- Additional assessment of student achievement may include assignments, quizzes, and exams.
- Application problems must not only be included on chapter exams but also on the final exam.

General Course Requirements and Recommendations

- A graphing calculator is required of each student and the Mathematics Department recommends and uses the TI-84 Series.
- Access to an online homework management system is required.
- Access to a statistical software package is required.
- Application problems must be covered in all mathematics courses. Every section in any course outline that includes application problems must be covered.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for MATH 141

MATH165 - Mathematics for Calculus

Overview

Subject
Mathematics

Academic Department
Mathematics

School
Science, Tech, Engr & Math

Course Description
Topics include algebraic, graphical and numerical representations of functions, including transformations, composition and inverses of functions. Focuses on the study of polynomial, rational, root, exponential and logarithmic functions, and trigonometric and inverse trigonometric functions of real numbers. Also includes equation solving and trigonometric identities. Techniques of problem solving and applications are included throughout the course requiring the frequent usage of graphing utilities. Requires a non-graphing scientific calculator for some formal assessments and access to an online homework system.

Course Pre-requisite(s)
MATH110 Intermediate Algebra with a grade of B- or better OR placement into MATH115 College Algebra

Credit Hours
6

Total Contact Hours

Total Instructor Contact Hours:
92

Total Student Contact Hours:
92

Course Fee
10

Academic Level
Undergraduate

General Education Category
Mathematics

Michigan Transfer Agreement (MTA) Category
Category 3: Mathematics - Applied Degrees, Category 3: Mathematics - Transfer Degrees - College Algebra Track

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other Exam

Credit for Prior College Level Learning (CPCLL) Details
Minimum Score on Other Exam

At least 50 on the CLEP Precalculus exam

Goals, Topics, and Objectives

Course Goals
1. To develop the advanced algebraic skills needed in college-level science and mathematics courses.
2. To develop an understanding of functions represented algebraically, graphically and numerically necessary for the study of higher level science and mathematics.
3. To develop an understanding of polynomial functions, rational functions, exponential functions, logarithmic functions and trigonometric functions of real numbers and angles.
4. To develop familiarity with some mathematical and physical applications of advanced algebra and trigonometry.
5. To incorporate graphing utilities whenever appropriate to illustrate concepts and solve problems.
6. To develop in students the problem-solving skills needed to interpret, analyze and solve applied problems requiring precalculus-level skills in advanced algebra and trigonometry.

Core Course Topics

1. Functions and Their Graphs
    1. Determine if an equation, graph, or table of values represents a function, and state the domain and range of the function.
    2. Determine graphically and algebraically whether a function is even, odd, or neither.
    3. Test algebraically symmetry with respect to x-axis, y-axis, and the origin.
    4. Determine the local minima and local maxima of a function and the interval(s) on which the function is increasing, decreasing and/or constant, given the graph of the function and using a graphing utility.
    5. Graph identity, constant, square, cubic, square root, cube root, absolute value, greatest integer, and reciprocal functions of the form 1/x and 1/(x squared), and check using the graphing utility.
    6. Analyze and graph functions in terms of translations, reflections, and expansions or contractions.
    7. Determine the graph of a function obtained from a series of transformations.
    8. Graph piecewise-defined functions and determine their domains and ranges.
    9. Form the sum, difference, product, quotient, and composition of two functions and determine their domains, given their equations or graphs.
    10. Find and simplify the difference quotient of a function.
    11. Relate the difference quotient and average rate of change of a function.
    12. Solve absolute value equations and inequalities algebraically and graphically.
    13. With the aid of a graphing utility, determine points of maximization or minimization in situations dealing with distances, areas, and volumes of various geometric figures, as well as in real-world business situations involving revenues, costs, and profits.
2. Polynomial Functions and their Graphs
    1. Determine algebraically the intercepts of a polynomial function, and verify graphically.
    2. Determine a polynomial function's intercepts, extreme values, turning points, and intervals of increase and decrease by using a graphing utility.
    3. Determine the end behavior of a polynomial function using the degree of the polynomial and its leading coefficient.
    4. Construct a polynomial function with specified zeros.
    5. Test factors of polynomial functions by using the Remainder and Factor Theorems, and factor polynomial functions to find the real zeros.
    6. Solve polynomial equations by using the Rational Zeros Theorem and synthetic division in conjunction with a graphing utility.
    7. Find the complex solutions of polynomial equations.
    8. Solve polynomial inequalities algebraically and graphically.
3. Rational Functions
    1. Find the domain of a rational function.
    2. Find vertical and horizontal asymptotes and oblique asymptotes of the graph of a rational function algebraically, graphically, and numerically.
    3. Find the x-intercept(s), y-intercept and coordinates of any hole(s) in the graph of a rational function.
    4. Graph a rational function by hand and check it by using a graphing utility.
    5. Solve rational equations and inequalities algebraically and graphically.
    6. Solve application problems involving rational functions.
4. Exponential and Logarithmic Functions
    1. Determine if a function is one-to-one and find its inverse if possible.
    2. Define and graph basic exponential and logarithmic functions (with a strong emphasis on functions with base 10 and e) and their transformations, and identify their domains, ranges, intercepts and asymptotes both by hand and using a graphing utility.
    3. Solve exponential and logarithmic equations both algebraically and graphically using a graphing utility.
    4. Use exponential and /or logarithmic functions to solve problems involving compound interest and growth and decay.

5. Expand or condense logarithmic expressions using the properties of logarithms.
6. Use the change of base formula to find the logarithm of any base other than 10 or e.

5. Angles and Trigonometric Functions
    1. Sketch a given angle in standard position.
    2. Apply the relationship between arc length, area of a sector, central angle, and the radius of a circle and that between linear speed, angular speed, and the radius of a circle.
    3. State the unit circle definitions and the domain and range of each of the six trigonometric functions for any real number t.
    4. Find exact values of the six trigonometric functions of special real numbers in standard position if given partial information.
    5. Evaluate the six trigonometric function of an acute angle of a right triangle.
    6. Use the Reciprocal Identities, Quotient Identities, Even-Odd Identities, and the Pythagorean Identities to simplify trigonometric expressions.
    7. Sketch the graphs of the of sine, cosine, and tangent trigonometric functions and their transformations both by hand and by using a graphing utility, stating their periods, amplitudes, and phase shifts if applicable.
    8. Find an equation for a sinusoidal graph.
6. Analytic Trigonometry
    1. Define the inverse sine, inverse cosine, and inverse tangent functions, and determine their domains and ranges.
    2. Evaluate the inverse sine, inverse cosine, and inverse tangent function values exactly when possible and, if not possible, approximate using a graphing utility.
    3. Use properties of inverse functions to find the exact value of certain composite functions and solve equations.
    4. Determine graphically whether an equation appears to be an identity if so verify algebraically.
    5. Use identities, including, Quotient Identities, Reciprocal Identities, the Pythagorean Identities, the Even-Odd Identities, the Sum and Difference Identities, the Double Angle Identities, and the Half Angle Identities for sine, cosine and tangent to simplify expressions.
    6. Determine exact solutions of trigonometric equations.
    7. Estimate solutions to trigonometric equations by using a graphing utility.

Functions and Their Graphs: Determine if an equation, graph, or table of values represents a function, and state the domain and range of the function.

Functions and Their Graphs: Determine graphically and algebraically whether a function is even, odd, or neither.

Functions and Their Graphs: Test algebraically symmetry with respect to x-axis, y-axis, and the origin.

Functions and Their Graphs: Determine the local minima and local maxima of a function and the interval(s) on which the function is increasing, decreasing and/or constant, given the graph of the function and using a graphing utility.

Functions and Their Graphs: Graph identity, constant, square, cubic, square root, cube root, absolute value, greatest integer, and reciprocal functions of the form 1/x and 1/(x squared), and check using the graphing utility.

Functions and Their Graphs: Analyze and graph functions in terms of translations, reflections, and expansions or contractions.

Functions and Their Graphs: Determine the graph of a function obtained from a series of transformations.

Functions and Their Graphs: Graph piecewise-defined functions and determine their domains and ranges.

Functions and Their Graphs: Form the sum, difference, product, quotient, and composition of two functions and determine their domains, given their equations or graphs.

Functions and Their Graphs: Find and simplify the difference quotient of a function.

Functions and Their Graphs: Relate the difference quotient and average rate of change of a function.

Functions and Their Graphs: Solve absolute value equations and inequalities algebraically and graphically.

Functions and Their Graphs: With the aid of a graphing utility, determine points of maximization or minimization in situations dealing with distances, areas, and volumes of various geometric figures, as well as in real-world business situations involving revenues, costs, and profits.

Polynomial Functions and their Graphs: Determine algebraically the intercepts of a polynomial function, and verify graphically.

Polynomial Functions and their Graphs: Determine a polynomial function's intercepts, extreme values, turning points, and intervals of increase and decrease by using a graphing utility.

Polynomial Functions and their Graphs: Determine the end behavior of a polynomial function using the degree of the polynomial and its leading coefficient.

Polynomial Functions and their Graphs: Construct a polynomial function with specified zeros.

Polynomial Functions and their Graphs: Test factors of polynomial functions by using the Remainder and Factor Theorems, and factor polynomial functions to find the real zeros.

Polynomial Functions and their Graphs: Solve polynomial equations by using the Rational Zeros Theorem and synthetic division in conjunction with a graphing utility.

Polynomial Functions and their Graphs: Find the complex solutions of polynomial equations.

Polynomial Functions and their Graphs: Solve polynomial inequalities algebraically and graphically.

Rational Functions: Find the domain of a rational function.

Rational Functions: Find vertical and horizontal asymptotes and oblique asymptotes of the graph of a rational function algebraically, graphically, and numerically.

Rational Functions: Find the x-intercept(s), y-intercept and coordinates of any hole(s) in the graph of a rational function.

Rational Functions: Graph a rational function by hand and check it by using a graphing utility.

Rational Functions: Solve rational equations and inequalities algebraically and graphically.

Rational Functions: Solve application problems involving rational functions.

Exponential and Logarithmic Functions: Determine if a function is one-to-one and find its inverse if possible.

Exponential and Logarithmic Functions: Define and graph basic exponential and logarithmic functions (with a strong emphasis on functions with base 10 and e) and their transformations, and identify their domains, ranges, intercepts and asymptotes both by hand and using a graphing utility.

Exponential and Logarithmic Functions: Solve exponential and logarithmic equations both algebraically and graphically using a graphing utility.

Exponential and Logarithmic Functions: Use exponential and /or logarithmic functions to solve problems involving compound interest and growth and decay.

Exponential and Logarithmic Functions: Expand or condense logarithmic expressions using the properties of logarithms.

Exponential and Logarithmic Functions: Use the change of base formula to find the logarithm of any base other than 10 or e.

Angles and Trigonometric Functions: Sketch a given angle in standard position.

Angles and Trigonometric Functions: Apply the relationship between arc length, area of a sector, central angle, and the radius of a circle and that between linear speed, angular speed, and the radius of a circle.

Angles and Trigonometric Functions: State the unit circle definitions and the domain and range of each of the six trigonometric functions for any real number t.

Angles and Trigonometric Functions: Find exact values of the six trigonometric functions of special real numbers in standard position if given partial information.

Angles and Trigonometric Functions: Evaluate the six trigonometric functions of an acute angle of a right triangle.

Angles and Trigonometric Functions: Use the Reciprocal Identities, Quotient Identities, Even-Odd Identities, and the Pythagorean Identities to simplify trigonometric expressions.

Angles and Trigonometric Functions: Sketch the graphs of the sine, cosine, and tangent trigonometric functions and their transformations both by hand and by using a graphing utility, stating their periods, amplitudes, and phase shifts if applicable.

Angles and Trigonometric Functions: Find an equation for a sinusoidal graph.

Analytic Trigonometry: Define the inverse sine, inverse cosine, and inverse tangent functions, and determine their domains and ranges.

Analytic Trigonometry: Evaluate the inverse sine, inverse cosine, and inverse tangent function values exactly when possible and, if not possible, approximate using a graphing utility.

Analytic Trigonometry: Use properties of inverse functions to find the exact value of certain composite functions and solve equations.

Analytic Trigonometry: Determine graphically whether an equation appears to be an identity if so verify algebraically.

Analytic Trigonometry: Use identities, including, Quotient Identities, Reciprocal Identities, the Pythagorean Identities, the Even-Odd Identities, the Sum and Difference Identities, the Double Angle Identities, and the Half Angle Identities for sine, cosine and tangent to simplify expressions.

Analytic Trigonometry: Determine exact solutions of trigonometric equations.

Analytic Trigonometry: Estimate solutions to trigonometric equations by using a graphing utility.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement

- All students will be required to complete a comprehensive final examination that assesses the learning of all course objectives. This final exam must be weighted in a manner so that this exam score is worth a minimum of twenty percent (20%) of the final course grade. In selected semesters this final exam may be a common final exam administered to all sections of MATH165 Mathematics for Calculus.
- All students will be required to complete at least two proctored on-campus exams. The cumulative value of those exams must be at least 40% of a student's final grade.
- All students will be required to complete online homework. This online homework must be weighted in such a manner so that it is worth between six percent (6%) and twelve percent (12%) of the final course grade.
- Additional assessment of student achievement may include assignments, projects, quizzes, and exams.
- *Attendance* is defined as presence. While regular engagement is critical for student success, no grade-bearing credit shall be awarded solely for attendance.
- *Participation* (also referred to as engagement) is defined as the completion of an academic activity. To ensure that course grades continue to primarily reflect activities that lead to or demonstrate mastery of the mathematics curriculum, participation may account for no more than 10% of the overall course grade in all Mathematics Department courses.
- For proctored in-person formal assessments (quizzes, tests, and exams) the only technology students can use is a non-graphing scientific calculator. Quizzes, tests, and exams may have non-calculator parts. Class projects and informal assessments will require students to use a free graphing application to support learning.
- All relevant application problems must be assessed throughout the semester. Application problems must be included in the final exam.

General Course Requirements and Recommendations

- A non-graphing scientific calculator is required for formal assessments.
- Free graphing applications may be used to support learning for informal assessments and class work.
- Access to an online homework management system is also required.
- Application problems must be covered in all mathematics courses. Every section in any course outline that includes application problems must be covered.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for MATH 165

MATH175 - Precalculus

Overview

Subject
Mathematics

Academic Department
Mathematics

School
Science, Tech, Engr & Math

Course Description
Topics include algebraic, graphical and numerical representations of functions, including composition and inverses of functions. Focuses on the study of rational functions, exponential and logarithmic functions, and trigonometric functions of real numbers and angles. Also includes analytic trigonometry and solutions of triangles. Techniques of problem solving and applications are included throughout the course requiring the frequent usage of graphing utilities. Requires a non-graphing scientific calculator for some formal assessments and access to an online homework system.

Course Pre-requisite(s)
MATH115 College Algebra with a C grade or better or a satisfactory score on the placement test.

Credit Hours
5

Total Contact Hours

Total Instructor Contact Hours:
77

Total Student Contact Hours:
77

Course Fee
10

Academic Level
Undergraduate

General Education Category
Mathematics

Michigan Transfer Agreement (MTA) Category
Category 3: Mathematics - Applied Degrees, Category 3: Mathematics - Transfer Degrees - College Algebra Track

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other Exam

Credit for Prior College Level Learning (CPCLL) Details
A student may receive credit for MATH175 Precalculus by earning one of the minimum scores from the following exams:

1. At least 50 on the CLEP Pre-Calculus exam, or
2. At least 5 on the International Baccalaureate-Standard Level (IB-SL) Mathematics Exam.
3. At least 3 on the Advanced Placement (AP) Precalculus test.

Goals, Topics, and Objectives

Course Goals

1. To develop an understanding of functions represented algebraically, graphically and numerically necessary for the study of higher level science and mathematics.
2. To develop an understanding of rational functions, exponential and logarithmic functions and trigonometric functions of real numbers and angles.
3. To develop familiarity with some mathematical and physical applications of advanced algebra and trigonometry.
4. To incorporate graphing utilities whenever appropriate to illustrate concepts and solve problems.
5. To develop in students the problem-solving skills needed to interpret, analyze and solve applied problems requiring precalculus-level skills in advanced algebra and trigonometry.

In the pre-requisite course, students demonstrate knowledge of polynomial functions and the fundamental theorem of algebra.

Core Course Topics

1. Functions and Their Graphs
    1. Determine the local minima and local maxima of a function and the interval(s) on which the function is increasing, decreasing and/or constant, given the graph of the function.
    2. Form the sum, difference, product, quotient, and composition of two functions and determine their domains, given their equations or graphs.
    3. Compute and relate the difference quotient and average rate of change of a function.
    4. Graph piecewise-defined functions and determine their domains and ranges.
    5. With the aid of a graphing utility, determine points of maximization or minimization in situations dealing with distances, areas, and volumes of various geometric figures, as well as in real-world business situations involving revenues, costs, and profits.
2. Rational Functions
    1. Find the domain of a rational function.
    2. Find vertical and horizontal asymptotes of the graph of a rational function algebraically, graphically, and numerically.
    3. Find the x-intercept(s), y-intercept and coordinates of any hole(s) in the graph of a rational function.
    4. Graph a rational function by hand and check it by using a graphing utility.
    5. Solve application problems involving rational functions.
3. Exponential and Logarithmic Functions
    1. Determine if a function is one-to-one and find its inverse if possible.
    2. Define and graph basic exponential and logarithmic functions (with a strong emphasis on functions with base 10 and e) and their transformations, and identify their domains, ranges, intercepts and asymptotes both by hand and by using a graphing utility.
    3. Solve exponential and logarithmic equations both algebraically and graphically using a graphing utility.
    4. Use exponential and/or logarithmic functions to solve problems involving compound interest and growth and decay.
    5. Expand or condense logarithmic expressions using the properties of logarithms.
    6. Use the change of base formula to find the logarithm of any base other than 10 or e.
    7. Use a graphing utility to obtain the power, exponential, logarithmic, or logistic functions of best fit of a given set of values and then determine the model of best fit.
    8. Solve applied problems involving power, logarithmic, exponential, or logistic regression functions by using a graphing utility.
4. Angles and Trigonometric Functions
    1. Sketch a given angle in standard position.
    2. Convert angles measured in degrees to radian measure and vice versa.
    3. Apply the relationship between arc length, area of a sector, central angle, and the radius of a circle and that between linear speed, angular speed, and the radius of a circle.
    4. State the unit circle definitions and the domain and range of each of the six trigonometric functions for any real number t.
    5. Find exact values of the six trigonometric functions of special real numbers or of angles in standard position if given partial information.
    6. Use the Reciprocal Identities, Quotient Identities, Even-Odd Identities, and the Pythagorean Identities to simplify trigonometric expressions.
    7. Sketch the graphs of the of sine, cosine, and tangent trigonometric functions and their transformations both by hand and by using a graphing utility, stating their periods, amplitudes, and phase shifts if applicable.
    8. Find an equation for a sinusoidal graph.

5. Analytic Trigonometry
    1. Define the inverse sine, inverse cosine, and inverse tangent functions, and determine their domains and ranges.
    2. Evaluate the inverse sine, inverse cosine, and inverse tangent function values exactly when possible and, if not possible, approximate using a graphing utility.
    3. Use properties of inverse functions to find the exact value of certain composite functions and solve equations.
    4. Determine graphically whether an equation appears to be an identity.
    5. Use the Quotient Identities, Reciprocal Identities, the Pythagorean Identities, the Even-Odd Identities, the Sum and Difference Identities, the Double Angle Identities, and the Half Angle Identities for sine, cosine and tangent to simplify expressions, to determine exact solutions of equations, or to verify identities.
    6. Estimate solutions to trigonometric equations by using a graphing utility.
6. Applications of Trigonometric Functions
    1. Evaluate the six trigonometric functions of an acute angle of a right triangle and use these values in applied problems.
    2. Utilize the Law of Cosines and/or the Law of Sines, including the ambiguous case, to solve an oblique triangle in applied problems.
    3. Use the formula for the area of a triangle in applied problems.

Functions and Their Graphs: Determine the local minima and local maxima of a function and the interval(s) on which the function is increasing, decreasing and/or constant, given the graph of the function.

Functions and Their Graphs: Form the sum, difference, product, quotient, and composition of two functions and determine their domains, given their equations or graphs.

Functions and Their Graphs: Compute and relate the difference quotient and average rate of change of a function.

Functions and Their Graphs: Graph piecewise-defined functions and determine their domains and ranges.

Functions and Their Graphs: With the aid of a graphing utility, determine points of maximization or minimization in situations dealing with distances, areas, and volumes of various geometric figures, as well as in real-world business situations involving revenues, costs, and profits.

Rational Functions: Find the domain of a rational function.

Rational Functions: Find vertical and horizontal asymptotes of the graph of a rational function algebraically, graphically, and numerically.

Rational Functions: Find the x-intercept(s), y-intercept and coordinates of any hole(s) in the graph of a rational function.

Rational Functions: Graph a rational function by hand and check it by using a graphing utility.

Rational Functions: Solve application problems involving rational functions.

Exponential and Logarithmic Functions: Determine if a function is one-to-one and find its inverse if possible.

Exponential and Logarithmic Functions: Define and graph basic exponential and logarithmic functions (with a strong emphasis on functions with base 10 and e) and their transformations, and identify their domains, ranges, intercepts and asymptotes both by hand and by using a graphing utility.

Exponential and Logarithmic Functions: Solve exponential and logarithmic equations both algebraically and graphically using a graphing utility.

Exponential and Logarithmic Functions: Use exponential and/or logarithmic functions to solve problems involving compound interest and growth and decay.

Exponential and Logarithmic Functions: Expand or condense logarithmic expressions using the properties of logarithms.

Exponential and Logarithmic Functions: Use the change of base formula to find the logarithm of any base other than 10 or e.

Exponential and Logarithmic Functions: Use a graphing utility to obtain the power, exponential, logarithmic, or logistic functions of best fit of a given set of values and then determine the model of best fit.

Exponential and Logarithmic Functions: Solve applied problems involving power, logarithmic, exponential, or logistic regression functions by using a graphing utility.

Angles and Trigonometric Functions: Sketch a given angle in standard position.

Angles and Trigonometric Functions: Convert angles measured in degrees to radian measure and vice versa.

Angles and Trigonometric Functions: Apply the relationship between arc length, area of a sector, central angle, and the radius of a circle and that between linear speed, angular speed, and the radius of a circle.

Angles and Trigonometric Functions: State the unit circle definitions and the domain and range of each of the six trigonometric functions for any real number t.

Angles and Trigonometric Functions: Find exact values of the six trigonometric functions of special real numbers or of angles in standard position if given partial information.

Angles and Trigonometric Functions: Use the Reciprocal Identities, Quotient Identities, Even-Odd Identities, and the Pythagorean Identities to simplify trigonometric expressions.

Angles and Trigonometric Functions: Sketch the graphs of the of sine, cosine, and tangent trigonometric functions and their transformations both by hand and by using a graphing utility, stating their periods, amplitudes, and phase shifts if applicable.

Angles and Trigonometric Functions: Find an equation for a sinusoidal graph.

Analytic Trigonometry: Define the inverse sine, inverse cosine, and inverse tangent functions, and determine their domains and ranges.

Analytic Trigonometry: Evaluate the inverse sine, inverse cosine, and inverse tangent function values exactly when possible and, if not possible, approximate using a graphing utility.

Analytic Trigonometry: Use properties of inverse functions to find the exact value of certain composite functions and solve equations.

Analytic Trigonometry: Determine graphically whether an equation appears to be an identity.

Analytic Trigonometry: Use the Quotient Identities, Reciprocal Identities, the Pythagorean Identities, the Even-Odd Identities, the Sum and Difference Identities, the Double Angle Identities, and the Half Angle Identities for sine, cosine and tangent to simplify expressions, to determine exact solutions of equations, or to verify identities.

Analytic Trigonometry: Estimate solutions to trigonometric equations by using a graphing utility.

Applications of Trigonometric Functions: Evaluate the six trigonometric functions of an acute angle of a right triangle and use these values in applied problems.

Applications of Trigonometric Functions: Utilize the Law of Cosines and/or the Law of Sines, including the ambiguous case, to solve an oblique triangle in applied problems.

Applications of Trigonometric Functions: Use the formula for the area of a triangle in applied problems.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement

- All students will be required to complete a comprehensive final examination that assesses the learning of all course objectives. This final exam must be weighted in a manner so that this exam score is worth a minimum of twenty percent (20%) of the final course grade. In selected semesters this final exam may be a common final exam administered to all sections of MATH175 Precalculus.
- All students will be required to complete at least two proctored on-campus exams. The cumulative value of those exams must be at least 40% of a student's final grade.
- All students will be required to complete online homework. This online homework must be weighted in such a manner so that it is worth between six percent (6%) and twelve percent (12%) of the final course grade.
- Additional assessment of student achievement may include assignments, quizzes, projects, and exams.
- *Attendance* is defined as presence. While regular engagement is critical for student success, no grade-bearing credit shall be awarded solely for attendance.
- *Participation* (also referred to as engagement) is defined as the completion of an academic activity. To ensure that course grades continue to primarily reflect activities that lead to or demonstrate mastery of the mathematics curriculum, participation may account for no more than 10% of the overall course grade in all Mathematics Department courses.
- For proctored in-person formal assessments (quizzes, tests, and exams) the only technology students can use is a non-graphing scientific calculator. Quizzes, tests, and exams may have non-calculator parts. Class projects and informal assessments will require students to use a free graphing application to support learning.
- All relevant application problems must be assessed throughout the semester. Application problems must be included in the final exam.

General Course Requirements and Recommendations

- A non-graphing scientific calculator is required for formal assessments.
- Free graphing applications may be used to support learning for informal assessments and class work.
- Access to an online homework management system is also required.

- Application problems must be covered in all mathematics courses. Every section in any course outline that includes application problems must be covered.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for MATH 175

MATH180 - Calculus I

Overview

Subject
Mathematics

Academic Department
Mathematics

School
Science, Tech, Engr & Math

Course Description
For students planning to pursue a course of study involving a concentration in mathematics. Topics include limits, continuity, the derivative, differentiation of algebraic, exponential, logarithmic, trigonometric and inverse trigonometric functions, applications of the derivative, antidifferentiation, and the definite integral. Numerical, graphical and algebraic approaches are used whenever possible. Credit cannot be earned for both MATH 153 and 180. Requires a non-graphing scientific calculator for some formal assessments, access to a free graphing utility application to support learning and during informal assessments, and access to an online homework system.

Course Pre-requisite(s)
MATH165 Mathematics for Calculus OR MATH175 Precalculus with a C or better OR a satisfactory score on the placement test.

Credit Hours
5

Total Contact Hours
Total Instructor Contact Hours:
77

Total Student Contact Hours:
77

Course Fee
10

Academic Level
Undergraduate

General Education Category
Mathematics

Michigan Transfer Agreement (MTA) Category
Category 3: Mathematics - Applied Degrees, Category 3: Mathematics - Transfer Degrees - College Algebra Track

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other Exam

Credit for Prior College Level Learning (CPCLL) Details
A student may receive credit for MATH-180 by earning one of the minimum scores from the following exams:

1. At least 50 on the CLEP Calculus exam, or
2. At least 3 on the Advanced Placement (AP) Calculus AB test,
3. At least 3 on the Advanced Placement (AP) Calculus BC test,
4. At least 5 on the International Baccalaureate-Standard Level (IB-SL) Mathematics Exam (IB-SL-based credit awarded only after completion of MATH-183 with a grade of C or higher), or
5. At least 5 on the International Baccalaureate-Higher Level (IB-HL) Mathematics Exam.

Goals, Topics, and Objectives

Course Goals
1. To study the nature and significance of calculus for students of science, technology, engineering, and mathematics disciplines.
2. To demonstrate various applications of calculus to problems from the social sciences, physical sciences, and engineering.
3. To present an exposition of calculus that incorporates graphical, numerical, and algebraic analysis, without undue emphasis on theoretical abstraction or routine mechanical manipulation.
4. To use technology to illustrate calculus concepts and verify calculus solutions to application problems.
5. To provide students with an exposure to the logical reasoning of mathematics.

Core Course Topics
1. Introduction to Limits
    1. Determine limits of functions using numerical, algebraic and graphical methods.
    2. Determine infinite limits and limits at infinity.
    3. Determine continuity or discontinuity using the limit.
2. Derivatives of Functions
    1. Find the derivative of functions using the limit definition of the derivative.
    2. Differentiate algebraic, logarithmic, exponential, trigonometric and inverse trigonometric functions using derivative rules.
    3. Differentiate composite functions using the chain rule.
    4. Find the derivative of a function defined implicitly.
3. Applications of the Derivative
    1. Use the derivative to find instantaneous rates of change and related rates of change in application problems.
    2. Use the derivative to find properties of functions: maxima and minima, increasing, decreasing, concavity, points of inflection and use this information to sketch the graph of functions.
    3. Solve optimization problems using the derivative.
    4. Determine the linear approximation of functions using the derivative.
    5. Apply the Mean Value Theorem.
    6. Use the derivative to define and check the antiderivative function.
4. Integration of Functions
    1. Approximate the area under a curve using the Riemann Sum with left endpoint, right endpoint, and midpoint.
    2. Find the antiderivatives (indefinite integrals) of algebraic, logarithmic, exponential, trigonometric and inverse trigonometric functions using integration rules.
    3. Approximate the definite integral using the Riemann Sum with left endpoint, right endpoint, and midpoint.
    4. Find the definite integral using the Fundamental Theorem of Calculus.
    5. Use the integral to find the average value of a function.
    6. Determine the integral of composite functions using the substitution rule.
5. Applications of Integration
    1. Find the position and velocity functions from the acceleration function using integration.
    2. Find the net rate of change of a function using integration.
    3. Determine the area between two curves by integration with respect to x or y.

Introduction to Limits: Determine limits of functions using numerical, algebraic and graphical methods.
Introduction to Limits: Determine infinite limits and limits at infinity.
Introduction to Limits: Determine continuity or discontinuity using the limit.

Derivatives of Functions: Find the derivative of functions using the limit definition of the derivative.

Derivatives of Functions: Differentiate algebraic, logarithmic, exponential, trigonometric and inverse trigonometric functions using derivative rules.

Derivatives of Functions: Differentiate composite functions using the chain rule.

Derivatives of Functions: Find the derivative of a function defined implicitly.

Applications of the Derivative: Use the derivative to find instantaneous rates of change and related rates of change in application problems.

Applications of the Derivative: Use the derivative to find properties of functions: maxima and minima, increasing, decreasing, concavity, points of inflection and use this information to sketch the graph of functions.

Applications of the Derivative: Solve optimization problems using the derivative.

Applications of the Derivative: Determine the linear approximation of functions using the derivative.

Applications of the Derivative: Apply the Mean Value Theorem.

Applications of the Derivative: Use the derivative to define and check the antiderivative function.

Integration of Functions: Approximate the area under a curve using the Riemann Sum with left endpoint, right endpoint, and midpoint.

Integration of Functions: Find the antiderivatives (indefinite integrals) of algebraic, logarithmic, exponential, trigonometric and inverse trigonometric functions using integration rules.

Integration of Functions: Approximate the definite integral using the Riemann Sum with left endpoint, right endpoint, and midpoint.

Integration of Functions: Find the definite integral using the Fundamental Theorem of Calculus.

Integration of Functions: Use the integral to find the average value of a function.

Integration of Functions: Determine the integral of composite functions using the substitution rule.

Applications of Integration: Find the position and velocity functions from the acceleration function using integration.

Applications of Integration: Find the net rate of change of a function using integration.

Applications of Integration: Determine the area between two curves by integration with respect to x or y.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement

- All students will be required to complete a comprehensive final examination that assesses the learning of all course objectives. This final exam must be weighted in a manner so that this exam score is worth a minimum of twenty percent (20%) of the final course grade. In selected semesters this final exam may be a common final exam administered to all sections of MATH180 Calculus 1.
- A minimum of 60% of the course grade must come from at least three proctored in-person paper exams (including the final exam).
- The final exam must be a proctored paper exam. The final exam must meet the minimum departmental percent but not be worth more than 40% of the final course grade.
- All students will be required to complete online homework. This online homework must be weighted in such a manner so that it is worth between six percent (6%) and twelve percent (12%) of the final course grade.
- Additional assessment of student achievement may include assignments, quizzes, projects, and exams.
- *Attendance* is defined as presence. While regular engagement is critical for student success, no grade-bearing credit shall be awarded solely for attendance.
- *Participation* (also referred to as *engagement*) is defined as the completion of an academic activity. To ensure that course grades continue to primarily reflect activities that lead to or demonstrate mastery of the mathematics curriculum, participation may account for no more than 10% of the overall course grade in all Mathematics Department courses.
- For proctored in-person formal assessments (quizzes, tests, and exams) the only technology students can use is a non-graphing scientific calculator. Quizzes, tests, and exams may have non-calculator parts. Class projects and informal assessments will require students to use a free graphing application to support learning.
- All relevant application problems must be assessed throughout the semester. Application problems must be included in the final exam.

General Course Requirements and Recommendations

- A non-graphing scientific calculator is required for proctored in-person formal assessments.
- Free graphing applications will be used to support learning, informal assessments, and class work.
- Access to an online homework management system is also required.
- Application problems must be covered in all mathematics courses.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for MATH 180

MATH183 - Calculus II

Overview

Subject
Mathematics

Academic Department
Mathematics

School
Science, Tech, Engr & Math

Course Description
Topics include applications of the integral, techniques of integration, numerical integration, improper integrals, solutions of separable differential equations, infinite series, polynomial approximations of functions, power series, Taylor and MacLaurin series, and parametric and polar equations. Utilizes numerical, graphical, and algebraic approaches whenever possible. Includes applications throughout the course. Requires a non-graphing scientific calculator for some formal assessments, access to a free graphing utility application to support learning and during informal assessments, and access to an online homework system.

Course Pre-requisite(s)
MATH180 Calculus 1 with a C grade or better

Credit Hours
5

Total Contact Hours

Total Instructor Contact Hours:
77

Total Student Contact Hours:
77

Course Fee
10

Academic Level
Undergraduate

General Education Category
Mathematics

Michigan Transfer Agreement (MTA) Category
Category 3: Mathematics - Applied Degrees, Category 3: Mathematics - Transfer Degrees - College Algebra Track

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other Exam

Credit for Prior College Level Learning (CPCLL) Details
A student may receive credit for MATH183 Calculus II by earning one of the minimum scores from the following exams:

1. At least 3 on the Advanced Placement (AP) Calculus BC test, or
2. At least 5 on the International Baccalaureate-Higher Level (IB-HL) Further Mathematics Exam.

Goals, Topics, and Objectives

Course Goals

1. To study the nature and significance of calculus for students of science, technology, engineering, and mathematics disciplines.
2. To demonstrate various applications of calculus to problems from the social sciences, physical sciences, and engineering.
3. To present an exposition of calculus that incorporates graphical, numerical, and algebraic analysis, without undue emphasis on theoretical abstraction or routine mechanical manipulation.
4. To use technology to illustrate calculus concepts and verify calculus solutions to application problems.
5. To provide students with an exposure to the logical reasoning of mathematics.

Core Course Topics

1. Applications of Integration
    1. Compute areas of regions between two curves.
    2. Compute the volumes of solids of revolution formed by revolving a region about horizontal or vertical lines using the Disk and the Washer Methods.
    3. Compute the arc length of a curve.
    4. Solve physical science problems involving mass, work, and force.
2. Integration Techniques
    1. Evaluate definite and indefinite integrals using substitution, parts, trigonometric identities, trigonometric substitution, partial fractions, and completing the square.
    2. Evaluate definite and indefinite integrals using tables.
    3. Approximate definite integrals using the midpoint rule, the trapezoidal rule, and Simpson's Rule, with and without the use of a graphing utility.
3. Improper Integrals
    1. Evaluate limits using L'Hopital's Rule.
    2. Determine whether an improper integral over infinite intervals converges or diverges and, if it converges, find its value.
    3. Determine whether an improper integral with an unbounded integrand converges or diverges and, if it converges, find its value.
    4. Use improper integrals to solve applications involving volumes of solids of revolution, areas, arc length, and other net change problems.
4. Introduction to Differential Equations
    1. Determine the order of a differential equation and whether it is linear or nonlinear.
    2. Verify that a function is a solution to a given differential equation.
    3. Solve separable differential equations.
5. Sequences
    1. Find the general term of a sequence given the initial terms of the sequence.
    2. Determine if a sequence converges or diverges and, if it converges, find its limit.
    3. Determine if a sequence is bounded, monotonic, or neither.
    4. Determine if a sequence is geometric.
    5. Draw a graph that represents a sequence using a graphing utility.
6. Infinite Series
    1. Determine if an infinite series is geometric and whether it converges or diverges and, if it converges, find the value to which it converges.
    2. Determine if an infinite series is telescoping and whether it converges or diverges and, if it converges, find the value to which it converges.
    3. Determine if an infinite series converges or diverges using the Divergence Test, the Integral Test, and the p-series Convergence Test.
    4. Estimate what a convergent infinite series converges to by using the Remainder Estimate for the Integral Test and a graphing utility.
    5. Determine if an infinite series converges or diverges using the Ratio, Root, Comparison, and Limit Comparison Tests.
    6. Determine if an infinite alternating series converges or diverges using the Alternating Series Test.
    7. Estimate what a convergent alternating series converges to by using the Remainder Theorem for Alternating Series and a graphing utility.
    8. Determine if an infinite series converges absolutely or conditionally.
    9. Solve application problems involving geometric series.
7. Power Series
    1. Find the nth-order Taylor polynomial of a given function centered at "a" and use it to approximate the function at a given value.
    2. Compute the absolute error in the remainder of a Taylor Polynomial of a given function centered at "a" using Taylor's Theorem along with a graphing utility.
    3. Find the interval of convergence and radius of convergence of power series by using the convergence and divergence tests of infinite series.
    4. Find a power series of a function by algebraically combining other power series and find the new interval of convergence.
    5. Find the derivative and the integral of a power series, the function represented by these processes, and the new interval of convergence for the resulting series.
    6. Find a Taylor and a MacLaurin Series for a given function and find the interval of convergence.
    7. Find derivatives and integrals using Taylor series, the functions represented by these processes, and the new intervals of convergence.
    8. Find limits of functions using Taylor Series.
8. Parametric and Polar Equations
    1. Graph parametric equations with and without the use of a graphing utility, making sure to indicate the orientation of the curve.
    2. Eliminate the parameter (if possible) in parametric equations to obtain Cartesian equations.
    3. Find parametric equations corresponding to Cartesian equations.
    4. Find dy/dx when y and x are defined in terms of a parameter t.
    5. Find the slope of the tangent line to a parametric curve at a specific point.
    6. Convert between Cartesian and polar coordinates.
    7. Graph basic polar curves with and without the use of a graphing utility.
    8. Find the slope of the tangent line to a polar curve at a specific point.
    9. Find the points at which a polar curve has a horizontal or a vertical tangent line.
    10. Find analytically all points of intersection of given polar curves.
    11. Find the areas of regions bounded by polar curves.
    12. Find the arc length of a polar curve.

Applications of Integration: Compute areas of regions between two curves.

Applications of Integration: Compute the volumes of solids of revolution formed by revolving a region about horizontal or vertical lines using the Disk and the Washer Methods.

Applications of Integration: Compute the arc length of a curve.

Applications of Integration: Solve physical science problems involving mass, work, and force.

Integration Techniques: Evaluate definite and indefinite integrals using substitution, parts, trigonometric identities, trigonometric substitution, partial fractions, and completing the square.

Integration Techniques: Evaluate definite and indefinite integrals using tables.

Integration Techniques: Approximate definite integrals using the midpoint rule, the trapezoidal rule, and Simpson's Rule, with and without the use of a graphing utility.

Improper Integrals: Evaluate limits using L'Hopital's Rule.

Improper Integrals: Determine whether an improper integral over infinite intervals converges or diverges and, if it converges, find its value.

Improper Integrals: Determine whether an improper integral with an unbounded integrand converges or diverges and, if it converges, find its value.

Improper Integrals: Use improper integrals to solve applications involving volumes of solids of revolution, areas, arc length, and other net change problems.

Introduction to Differential Equations: Determine the order of a differential equation and whether it is linear or nonlinear.

Introduction to Differential Equations: Verify that a function is a solution to a given differential equation.

Introduction to Differential Equations: Solve separable differential equations.

Sequences: Find the general term of a sequence given the initial terms of the sequence.

Sequences: Determine if a sequence converges or diverges and, if it converges, find its limit.

Sequences: Determine if a sequence is bounded, monotonic, or neither.

Sequences: Determine if a sequence is geometric.

Sequences: Draw a graph that represents a sequence using a graphing utility.

Infinite Series: Determine if an infinite series is geometric and whether it converges or diverges and, if it converges, find the value to which it converges.

Infinite Series: Determine if an infinite series is telescoping and whether it converges or diverges and, if it converges, find the value to which it converges.

Infinite Series: Determine if an infinite series converges or diverges using the Divergence Test, the Integral Test, and the p-series Convergence Test.

Infinite Series: Estimate what a convergent infinite series converges to by using the Remainder Estimate for the Integral Test and a graphing utility.

Infinite Series: Determine if an infinite series converges or diverges using the Ratio, Root, Comparison, and Limit Comparison Tests.

Infinite Series: Determine if an infinite alternating series converges or diverges using the Alternating Series Test.

Infinite Series: Estimate what a convergent alternating series converges to by using the Remainder Theorem for Alternating Series and a graphing utility.

Infinite Series: Determine if an infinite series converges absolutely or conditionally.

Infinite Series: Solve application problems involving geometric series.

Power Series: Find the nth-order Taylor polynomial of a given function centered at "a" and use it to approximate the function at a given value.

Power Series: Compute the absolute error in the remainder of a Taylor Polynomial of a given function centered at "a" using Taylor's Theorem along with a graphing utility.

Power Series: Find the interval of convergence and radius of convergence of power series by using the convergence and divergence tests of infinite series.

Power Series: Find a power series of a function by algebraically combining other power series and find the new interval of convergence.

Power Series: Find the derivative and the integral of a power series, the function represented by these processes, and the new interval of convergence for the resulting series.

Power Series: Find a Taylor and a MacLaurin Series for a given function and find the interval of convergence.

Power Series: Find derivatives and integrals using Taylor series, the functions represented by these processes, and the new intervals of convergence.

Power Series: Find limits of functions using Taylor Series.

Parametric and Polar Equations: Graph parametric equations with and without the use of a graphing utility, making sure to indicate the orientation of the curve.

Parametric and Polar Equations: Eliminate the parameter (if possible) in parametric equations to obtain Cartesian equations.

Parametric and Polar Equations: Find parametric equations corresponding to Cartesian equations.

Parametric and Polar Equations: Find dy/dx when y and x are defined in terms of a parameter t.

Parametric and Polar Equations: Find the slope of the tangent line to a parametric curve at a specific point.

Parametric and Polar Equations: Convert between Cartesian and polar coordinates.

Parametric and Polar Equations: Graph basic polar curves with and without the use of a graphing utility.

Parametric and Polar Equations: Find the slope of the tangent line to a polar curve at a specific point.

Parametric and Polar Equations: Find the points at which a polar curve has a horizontal or a vertical tangent line.

Parametric and Polar Equations: Find analytically all points of intersection of given polar curves.

Parametric and Polar Equations: Find the areas of regions bounded by polar curves.

Parametric and Polar Equations: Find the arc length of a polar curve.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement

- All students will be required to complete a comprehensive final examination that assesses the learning of all course objectives. This final exam must be weighted in a manner so that this exam score is worth a minimum of twenty percent (20%) of the final course grade. In selected semesters this final exam may be a common final exam administered to all sections of MATH183 Calculus II.
- A minimum of 60% of the course grade must come from at least three proctored in-person paper exams (including the final exam).
- The final exam must be a proctored paper exam. The final exam must meet the minimum departmental percent but not be worth more than 40% of the final course grade.
- All students will be required to complete online homework. This online homework must be weighted in such a manner so that it is worth between six percent (6%) and twelve percent (12%) of the final course grade.
- Additional assessment of student achievement may include assignments, quizzes, projects, and exams.
- *Attendance* is defined as presence. While regular engagement is critical for student success, no grade-bearing credit shall be awarded solely for attendance.
- *Participation* (also referred to as engagement) is defined as the completion of an academic activity. To ensure that course grades continue to primarily reflect activities that lead to or demonstrate mastery of the mathematics curriculum, participation may account for no more than 10% of the overall course grade in all Mathematics Department courses.
- For proctored in-person formal assessments (quizzes, tests, and exams) the only technology students can use is a non-graphing scientific calculator. Quizzes, tests, and exams may have non-calculator parts. Class projects and informal assessments will require students to use a free graphing application to support learning.
- All relevant application problems must be assessed throughout the semester. Application problems must be included in the final exam.

General Course Requirements and Recommendations

- A non-graphing scientific calculator is required for proctored in-person formal assessments.
- Free graphing applications will be used to support learning, informal assessments, and class work.
- Access to an online homework management system is also required.
- Application problems must be covered in all mathematics courses.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for MATH 183

MATH222 - Mathematics for Elementary Teachers II

Overview

Subject
Mathematics

Academic Department
Mathematics

School
Science, Tech, Engr & Math

Course Description
For students who are involved in a curriculum for elementary teachers. Topics include rational numbers, proportional reasoning, algebraic reasoning. Also, topics from geometry including Van Hiele levels of understanding, definitions of geometric concepts, measurement, conversions between units, concepts of perimeter, area and volume, derivations of formulas, flat patterns and symmetry. Addresses two aspects of teaching children mathematics - content and pedagogy - focused on Michigan Department of Education Standard for the Preparation of Teachers of Lower Elementary (Pre-K - 3), Upper Elementary (Grades 3 - 6), and Middle Grades (Grades 5 - 9). Also, addresses concept development, algorithms, children's mathematical work, communication skills--both oral and written--important for teaching children, and problem-solving skills.

Course Pre-requisite(s)
MATH121 or MATH122 Math for Elem Teachers I and ENG131 Introduction College Writing, both with a C or better

Credit Hours
4

Total Contact Hours
Total Instructor Contact Hours:
77

Total Student Contact Hours:
77

Course Fee
10

Academic Level
Undergraduate

General Education Category
Mathematics

Michigan Transfer Agreement (MTA) Category
Category 3: Mathematics - Applied Degrees, Category 3: Mathematics - Transfer Degrees - Quantitative Literacy Track

Goals, Topics, and Objectives

Course Goals

1. To strengthen mathematical problem-solving skills pertaining to curricular topics related to the preparation of future elementary school teachers.
2. To strengthen communication skills, both written and oral, of mathematical ideas.
3. To strengthen mathematical competence in rational numbers, algebraic and proportional reasoning, and geometry.
4. To develop pedagogical skills consistent with MDE Core Teaching Practices that are used for teaching mathematics to children.

Core Course Topics

1. Michigan Department of Education Core Practices
    1. Demonstrate knowledge of leading a group discussion.
    2. Demonstrate knowledge of explaining and modeling content, practices and strategies.
    3. Demonstrate knowledge of eliciting and interpreting individual students' thinking.
    4. Demonstrate knowledge of implementing norms and routines for classroom discourse and work.
2. Proportional Reasoning
    1. Identify additive and multiplicative comparisons.
    2. Apply the understanding of ratio to a variety of contexts.
    3. Represent proportional situations using a variety of models.
    4. Apply proportional reasoning using the unit-rate method.
3. Integers
    1. Model integers using a variety of models such as colored chips, number line, and charged particle.
    2. Use the relations of <, >, and = with integers.
    3. Model and explain integer operations using manipulatives.
    4. Develop and use the rules for integer operations.
    5. Demonstrate knowledge of the properties of integer operations.
    6. Solve problems involving integers.
4. Decimals (MDE Grades 3 – 6: M.9, M.10, M.11, M.12)
    1. Model decimals using a variety of manipulatives and hand-drawn methods.
    2. Model decimals using a variety of mathematical concepts.
    3. Compare decimals and develop the meaning of <, >, and = with decimals.
    4. Model and explain decimal operations using manipulatives.
    5. Demonstrate knowledge and understanding of the standard algorithms for decimal operations.
    6. Demonstrate proficiency in mental mathematics for decimal operations.
    7. Convert between fraction and decimal equivalents for both terminating and repeating decimals.
    8. Solve problems involving decimals.
    9. Respond to observations of children's mathematical work.
    10. Develop sets of problems with varying degrees of difficulty.
5. Algebraic Reasoning (MDE: B-K: M.9, M.10, M.11, M.12.)
    1. Apply the concept of variable to problem solving.
    2. Demonstrate an understanding of children's approaches to problem solving.
    3. Apply equation solving to problem solving.
    4. Apply knowledge of functions represented in a variety of forms.
6. Introductory Geometry (MDE: B-K: M.5, M.6, M.7, M.8.)
    1. Demonstrate an understanding of the Van Hiele levels of geometric understanding and implications for instruction.
    2. Use coordinate grids to locate objects in a variety of contexts.
    3. Decompose and recompose shapes.
    4. Give descriptions, properties and real-world models of points, rays, lines, planes, line segments and angles.
    5. Define terms related to angles and angle relationships.
    6. Define various types of polygons and their parts.
    7. Identify and model properties of and relationships among various types of polygons.
    8. Describe, classify and understand relationships among types of 2- and 3-dimensional objects.
    9. Define various types of polyhedra and curved shapes in 3 dimensions.
    10. Identify and model properties of and relationships among various types of polyhedra and curved shapes in 3 dimensions.
    11. Perform translations, rotations, reflections and combinations of these transformations on geometric figures.
    12. Describe and analyze tessellations with polygons, particularly but not exclusively, with regular polygons.
7. Concepts of Measurement (MDE: B-K: M.17, M.18, M.19, M.20)
    1. Develop the concepts of perimeter, area and volume using non-standard units and appropriate tools and units.
    2. Measure with standard units (English and metric) and nonstandard units for length, area and volume.
    3. Convert between various units, including those of length, area and volume, by using proportions and dimensional analysis.
    4. Do "rough" conversions between the metric system and the English system.
    5. Find the perimeter of a geometric figure, including polygons and circles.
    6. Derive and apply area formulas to find areas of rectangles, squares, triangles, parallelograms, trapezoids and circles.
8. Data Analysis (MDE: B-K: M. 21, M.22, M. 23, M.24)
    1. Unpack mathematical content and identify mathematical competence for collecting, representing, using and organizing information
    2. Use concrete materials in purposeful, relevant activities for collecting, representing, using and organizing information.
    3. Use graphs to interpret data.

Michigan Department of Education Core Practices: Demonstrate knowledge of leading a group discussion.

Michigan Department of Education Core Practices: Demonstrate knowledge of explaining and modeling content, practices and strategies.

Michigan Department of Education Core Practices: Demonstrate knowledge of eliciting and interpreting individual students' thinking.

Michigan Department of Education Core Practices: Demonstrate knowledge of implementing norms and routines for classroom discourse and work.

Proportional Reasoning: Identify additive and multiplicative comparisons.

Proportional Reasoning: Apply the understanding of ratio to a variety of contexts.

Proportional Reasoning: Represent proportional situations using a variety of models.

Proportional Reasoning: Apply proportional reasoning using the unit-rate method.

Integers: Model integers using a variety of models such as colored chips, number line, and charged particle.

Integers: Use the relations of <, >, and = with integers.

Integers: Model and explain integer operations using manipulatives.

Integers: Develop and use the rules for integer operations.

Integers: Demonstrate knowledge of the properties of integer operations.

Integers: Solve problems involving integers.

Decimals: Model decimals using a variety of manipulatives and hand-drawn methods.

Decimals: Model decimals using a variety of mathematical concepts.

Decimals: Compare decimals and develop the meaning of <, >, and = with decimals.

Decimals: Model and explain decimal operations using manipulatives.

Decimals: Demonstrate knowledge and understanding of the standard algorithms for decimal operations.

Decimals: Demonstrate proficiency in mental mathematics for decimal operations.

Decimals: Convert between fraction and decimal equivalents for both terminating and repeating decimals.

Decimals: Solve problems involving decimals.

Decimals: Respond to observations of children's mathematical work.

Decimals: Develop sets of problems with varying degrees of difficulty.

Algebraic Reasoning: Apply the concept of variable to problem solving.

Algebraic Reasoning: Demonstrate an understanding of children's approaches to problem solving.

Algebraic Reasoning: Apply equation solving to problem solving.

Algebraic Reasoning: Apply knowledge of functions represented in a variety of forms.

Introductory Geometry: Demonstrate an understanding of the Van Hiele levels of geometric understanding and implications for instruction.

Introductory Geometry: Use coordinate grids to locate objects in a variety of contexts.

Introductory Geometry: Decompose and recompose shapes.

Introductory Geometry: Give descriptions, properties and real-world models of points, rays, lines, planes, line segments and angles.

Introductory Geometry: Define terms related to angles and angle relationships.

Introductory Geometry: Define various types of polygons and their parts.

Introductory Geometry: Identify and model properties of and relationships among various types of polygons.

Introductory Geometry: Describe, classify and understand relationships among types of 2- and 3-dimensional objects.

Introductory Geometry: Define various types of polyhedra and curved shapes in 3 dimensions.

Introductory Geometry: Identify and model properties of and relationships among various types of polyhedra and curved shapes in 3 dimensions.

Introductory Geometry: Perform translations, rotations, reflections and combinations of these transformations on geometric figures.

Introductory Geometry: Describe and analyze tessellations with polygons, particularly but not exclusively, with regular polygons.

Concepts of Measurement: Develop the concepts of perimeter, area and volume using non-standard units and appropriate tools and units.

Concepts of Measurement: Measure with standard units (English and metric) and nonstandard units for length, area and volume.

Concepts of Measurement: Convert between various units, including those of length, area and volume, by using proportions and dimensional analysis.

Concepts of Measurement: Do "rough" conversions between the metric system and the English system.

Concepts of Measurement: Find the perimeter of a geometric figure, including polygons and circles.

Concepts of Measurement: Derive and apply area formulas to find areas of rectangles, squares, triangles, parallelograms, trapezoids and circles.

Data Analysis: Unpack mathematical content and identify mathematical competence for collecting, representing, using and organizing information.

Data Analysis: Use concrete materials in purposeful, relevant activities for collecting, representing, using and organizing information.

Data Analysis: Use graphs to interpret data.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement

- Pre-Education students are required to create an e-portfolio as part of their academic work at HFC. Instructors must include a minimum of three e-portfolio assignments as part of course work. These assignments will be stored in each student's e-portfolio.
- All students will be required to complete online homework. This online homework must be weighted in such a manner so that it is worth between six percent (6%) and twelve percent (12%) of the final course grade.
- All students will be required to complete a comprehensive final examination that assesses the learning of all course objectives. This exam must be weighted in a manner so that this exam score is worth a minimum of twenty percent (20%) of the final course grade. In selected semesters this exam may be a common exam administered to all sections of MATH 222.
- All students will be required to complete journal assignments.
- Additional assessment of student achievement may include assignments, quizzes, and exams.
- *Attendance* is defined as presence. While regular engagement is critical for student success, no grade-bearing credit shall be awarded solely for attendance.
- *Participation* (also referred to as engagement) is defined as the completion of an academic activity. To ensure that course grades continue to primarily reflect activities that lead to or demonstrate mastery of the mathematics curriculum, participation may account for no more than 10% of the overall course grade in all Mathematics Department courses.
- These application problems must not only be included on chapter exams but also on the final exam.

General Course Requirements and Recommendations

- Application problems must be covered in all mathematics courses. Every section in any course outline that includes application problems must be covered.
- A scientific calculator is required of each student.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for MATH 222

MATH275 - Discrete Mathematics

Overview

Subject
Mathematics

Academic Department
Mathematics

School
Science, Tech, Engr & Math

Course Description
For students in a computer engineering or computer science program. Covers logic, methods of proof, set theory, algorithms, recursion, correctness, relations, partial orderings, graphs, trees, Boolean algebra, grammars, and finite-state machines. Includes various applications throughout the course. Requires a non-graphing scientific calculator for some formal assessments, access to a free graphing utility application to support learning and during informal assessments, and access to an online homework system.

Course Pre-requisite(s)
MATH180 Calculus 1 with a C or better OR concurrent enrollment in MATH180 Calculus 1

Credit Hours
4

Total Contact Hours
Total Instructor Contact Hours:
77

Total Student Contact Hours:
77

Course Fee
10

Academic Level
Undergraduate

General Education Category
Mathematics

Michigan Transfer Agreement (MTA) Category
Category 3: Mathematics - Applied Degrees, Category 3: Mathematics - Transfer Degrees - College Algebra Track

Goals, Topics, and Objectives

Course Goals

1. To provide an introduction to the mathematical reasoning required to read, comprehend, and construct mathematical arguments.
2. To provide methods for working with discrete structures-the abstract mathematical structures used to represent discrete objects and the relationships between these objects.
3. To demonstrate classes of problems solved by the specification of algorithms.
4. To present applications of discrete mathematics-in particular, applications to computer science.

Core Course Topics

1. Logic and Proof
    1. Define the negation of a proposition.
    2. Define (using truth tables) the disjunction, conjunction, exclusive or, conditional, and biconditional of the propositions p and q.
    3. Define the converse, inverse, and contrapositive of a conditional statement.
    4. Determine whether two propositions are logically equivalent.
    5. Determine whether an argument is valid.
    6. Describe what is meant by, and give examples of, direct proofs and proofs by contradiction.
    7. Prove a biconditional statement.
    8. Apply the rules of logic to evaluate and construct mathematical arguments and proofs.
2. Sets and Functions
    1. Determine whether one set is a subset of another.
    2. Determine the cardinality of a set.
    3. Determine the union, intersection, difference, and symmetric difference of two sets.
    4. Explain the relationship between logical equivalences and set identities.
    5. Define the domain, codomain, and range of a function.
    6. Define what it means for a function to be one-to-one or onto and give examples of functions that are or are not one-to-one or onto.
    7. Define and apply various types of functions encountered in discrete structures, including the ceiling and floor functions and recursive functions.
3. Algorithms
    1. Describe algorithms, including search and sort algorithms, that will accomplish various tasks.
    2. Express an algorithm in pseudocode.
    3. Determine properties of an algorithm, including its computational complexity.
4. Induction and Recursion
    1. Prove a statement by mathematical induction.
    2. Prove a statement using strong induction.
    3. Give recursive definitions and describe recursive algorithms.
    4. Solve problems involving basic results from number theory, matrices, sequences and summations, and recursive definitions.
    5. Use assertions to determine the correctness of a program.
5. Counting
    1. Solve problems, including probability problems, that require counting principles (including the product rule, the sum rule, and principle of inclusion-exclusion).
    2. State, and solve problems involving, the Pigeonhole Principle.
    3. Determine, and solve problems involving, the number of permutations or combinations of n objects taken r at a time.
6. Relations
    1. Describe properties of a relation, including an n-ary relation.
    2. Represent a relation using various methods.
    3. Determine whether a relation is an equivalence relation.
    4. Determine whether a relation is a partial ordering.
7. Graphs and Trees
    1. Describe properties of graphs, including paths and connectedness.
    2. Determine whether a graph is bipartite.
    3. Determine whether two graphs are isomorphic.
    4. Determine whether a graph is a tree.
    5. Apply results relating the numbers of edges and vertices of various types in trees.
8. Boolean Algebra
    1. Compute the complement of a Boolean function.
    2. Compute the sum and product of Boolean functions.
9. Modeling Computation
    1. Describe properties of finite-state machines.

Logic and Proof: Define the negation of a proposition.

Logic and Proof: Define (using truth tables) the disjunction, conjunction, exclusive or, conditional, and biconditional of the propositions p and q.

Logic and Proof: Define the converse, inverse, and contrapositive of a conditional statement.

Logic and Proof: Determine whether two propositions are logically equivalent.

Logic and Proof: Determine whether an argument is valid.

Logic and Proof: Describe what is meant by, and give examples of, direct proofs and proofs by contradiction.

Logic and Proof: Prove a biconditional statement.

Logic and Proof: Apply the rules of logic to evaluate and construct mathematical arguments and proofs.

Sets and Functions: Determine whether one set is a subset of another.

Sets and Functions: Determine the cardinality of a set.

Sets and Functions: Determine the union, intersection, difference, and symmetric difference of two sets.

Sets and Functions: Explain the relationship between logical equivalences and set identities.

Sets and Functions: Define the domain, codomain, and range of a function.

Sets and Functions: Define what it means for a function to be one-to-one or onto and give examples of functions that are or are not one-to-one or onto.

Sets and Functions: Define and apply various types of functions encountered in discrete structures, including the ceiling and floor functions and recursive functions.

Algorithms: Describe algorithms, including search and sort algorithms, that will accomplish various tasks.

Algorithms: Express an algorithm in pseudocode.

Algorithms: Determine properties of an algorithm, including its computational complexity.

Induction and Recursion: Prove a statement by mathematical induction.

Induction and Recursion: Prove a statement using strong induction.

Induction and Recursion: Give recursive definitions and describe recursive algorithms.

Induction and Recursion: Solve problems involving basic results from number theory, matrices, sequences and summations, and recursive definitions.

Induction and Recursion: Use assertions to determine the correctness of a program.

Counting: Solve problems, including probability problems, that require counting principles (including the product rule, the sum rule, and principle of inclusion-exclusion).

Counting: State, and solve problems involving, the Pigeonhole Principle.

Counting: Determine, and solve problems involving, the number of permutations or combinations of n objects taken r at a time.

Relations: Describe properties of a relation, including an n-ary relation.

Relations: Represent a relation using various methods.

Relations: Determine whether a relation is an equivalence relation.

Relations: Determine whether a relation is a partial ordering.

Graphs and Trees: Describe properties of graphs, including paths and connectedness.

Graphs and Trees: Determine whether a graph is bipartite.

Graphs and Trees: Determine whether two graphs are isomorphic.

Graphs and Trees: Determine whether a graph is a tree.

Graphs and Trees: Apply results relating the numbers of edges and vertices of various types in trees.

Boolean Algebra: Compute the complement of a Boolean function.

Boolean Algebra: Compute the sum and product of Boolean functions.

Modeling Computation: Describe properties of finite-state machines.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement

- All students will be required to complete a comprehensive final examination that assesses the learning of all course objectives. This final exam must be weighted in a manner so that this exam score is worth a minimum of twenty percent (20%) of the final course grade. In selected semesters this final exam may be a common final exam administered to all sections of MATH275 Discrete Mathematics.
- A minimum of 60% of the course grade must come from at least three proctored in-person paper exams (including the final exam).
- The final exam must be a proctored paper exam. The final exam must meet the minimum departmental percent but not be worth more than 40% of the final course grade.
- Additional assessment of student achievement may include assignments, quizzes, projects, and exams.
- *Attendance* is defined as presence. While regular engagement is critical for student success, no grade-bearing credit shall be awarded solely for attendance.
- *Participation* (also referred to as engagement) is defined as the completion of an academic activity. To ensure that course grades continue to primarily reflect activities that lead to or demonstrate mastery of the mathematics curriculum, participation may account for no more than 10% of the overall course grade in all Mathematics Department courses.
- For proctored in-person formal assessments (quizzes, tests, and exams) the only technology students can use is a non-graphing scientific calculator. Quizzes, tests, and exams may have non-calculator parts. In some classes, projects and informal assessments may require students to use a free graphing application to support learning.
- All relevant application problems must be assessed throughout the semester. Application problems must be included in the final exam.

General Course Requirements and Recommendations

- A non-graphing scientific calculator is required for proctored in-person formal assessments.
- Free graphing applications will be used to support learning, informal assessments, and class work.
- Access to an online homework management system is also required.
- Application problems must be covered in all mathematics courses.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for MATH 275

MATH280 - Calculus III

Overview

Subject
Mathematics

Academic Department
Mathematics

School
Science, Tech, Engr & Math

Course Description
Covers topics such as the calculus of vector-valued functions, the differential calculus of functions of more than one variable, directional derivatives, gradients, partial derivatives, multiple integration, vector fields, and line integrals. Various applications are covered throughout the course. Utilizes numerical, graphical, and algebraic approaches whenever possible. Requires a non-graphing scientific calculator for some formal assessments, access to a free graphing utility application to support learning and during informal assessments, and access to an online homework system.

Course Pre-requisite(s)
MATH183 Calculus II with a C or better

Credit Hours
5

Total Contact Hours
Total Instructor Contact Hours:
77

Total Student Contact Hours:
77

Course Fee
10

Academic Level
Undergraduate

General Education Category
Mathematics

Michigan Transfer Agreement (MTA) Category
Category 3: Mathematics - Applied Degrees, Category 3: Mathematics - Transfer Degrees - College Algebra Track

Goals, Topics, and Objectives

Course Goals

1. To study the nature and significance of calculus for students of science, technology, engineering, and mathematics disciplines.
2. To demonstrate various applications of calculus to problems from the social sciences, physical sciences, and engineering.
3. To present an exposition of calculus that incorporates graphical, numerical, and algebraic analysis, without undue emphasis on theoretical abstraction or routine mechanical manipulation.
4. To use technology to illustrate calculus concepts and verify calculus solutions to application problems.
5. To provide students with an exposure to the logical reasoning of mathematics.

Core Course Topics

1. Vectors and Vector -Valued Functions
    1. Perform vector addition and scalar multiplication of vectors algebraically and geometrically.
    2. Identify and solve problems involving vectors in the plane and in 3-space both geometrically and algebraically.
    3. Compute the dot product for vectors in 2 and 3 dimensions and the cross product for vectors in 3 dimensions.
    4. Use the dot and cross products in applications such as computing the angle between 2 vectors, vector projections, scalar components, work and torque.
    5. Construct vector-valued functions in order to describe lines and curves in 3-space.
    6. Determine limits of vector-valued functions using numerical, algebraic and graphical methods.
    7. Determine continuity or discontinuity of vector-valued functions.
    8. Determine derivatives and integrals of vector-valued functions.
    9. Find the vector components of velocity and acceleration for particle motion in 3-space.
    10. Find the length of a curve in 3-space and be able to parameterize a given curve with respect to arc length.
    11. For a given curve, determine the unit tangent, unit normal, unit binormal and curvature.
2. Functions of Several Variables
    1. Determine the equation of a plane in 3-space using both the vector form and the scalar form.
    2. Write the equation for a given quadratic surface.
    3. Draw accurate and useful renditions of a surface given an equation by hand and using appropriate graphing application software.
    4. Use graphs of level curves (contour maps) to obtain information about an arbitrary surface.
    5. Determine limits of functions of several variables using numerical, algebraic and graphical methods.
    6. Determine continuity or discontinuity of functions of several variables.
    7. Find the first and second partial derivatives of functions using differentiation rules.
    8. Determine the gradient and directional derivatives for a function of several variables.
    9. Use the appropriate chain rule to differentiate composite functions of several variables.
    10. Use the gradient and directional derivatives to find instantaneous rates of change and related rates of change in application problems.
    11. Use the gradient and directional derivatives and the Second Partials Test to find properties of functions of several variables: maxima and minima and saddle points, and use this information to sketch the graph of functions.
    12. Solve optimization problems using the method of Lagrange Multipliers.
    13. Use the gradient and tangent plane to determine the linear approximation of a function of several variables.
3. Integration of Functions of Several Variables
    1. Integrate functions of 2 variables over regions in the xy-plane using Riemann sums and iterated integrals with respect to rectangular and/or polar coordinates.
    2. Integrate functions of 3 variables over 3-dimensional regions using Riemann sums and iterated integrals with respect to rectangular, cylindrical, or spherical coordinates.
    3. Use multiple integrals to solve application problems involving areas, volumes, masses, first and second moments, centers of mass, and moments of inertia.
4. Vector Fields
    1. Sketch vector fields by hand.
    2. Interpret vector fields as models of fluid flow.
    3. Compute line integrals over curves in 2- or 3-space.
    4. Determine whether a vector field is conservative or not.
    5. Use the Fundamental Theorem for Line Integrals to compute line integrals under appropriate conditions.
    6. Use Green's Theorem in the plane in flux form or in circulation form to compute line integrals.
    7. Compute the 2-dimensional divergence and curl for a vector field in 2-dimensions.
    8. Use line integrals to solve application problems involving work, mass, circulation and heat flux.
    9. Compute the 3-dimensional divergence and curl for a vector field in 3-dimensions.
    10. Compute surface integrals of scalar-valued functions.
    11. Compute surface integrals of vector fields.

12. Use Stokes' Theorem to evaluate line and surface integrals.
13. Use the Divergence Theorem to calculate flux.

Vectors and Vector -Valued Functions: Perform vector addition and scalar multiplication of vectors algebraically and geometrically.

Vectors and Vector -Valued Functions: Identify and solve problems involving vectors in the plane and in 3-space both geometrically and algebraically.

Vectors and Vector -Valued Functions: Compute the dot product for vectors in 2 and 3 dimensions and the cross product for vectors in 3 dimensions.

Vectors and Vector -Valued Functions: Use the dot and cross products in applications such as computing the angle between 2 vectors, vector projections, scalar components, work and torque.

Vectors and Vector -Valued Functions: Construct vector-valued functions in order to describe lines and curves in 3-space.

Vectors and Vector -Valued Functions: Determine limits of vector-valued functions using numerical, algebraic and graphical methods.

Vectors and Vector -Valued Functions: Determine continuity or discontinuity of vector-valued functions.

Vectors and Vector -Valued Functions: Determine derivatives and integrals of vector-valued functions.

Vectors and Vector -Valued Functions: Find the vector components of velocity and acceleration for particle motion in 3-space.

Vectors and Vector -Valued Functions: Find the length of a curve in 3-space and be able to parameterize a given curve with respect to arc length.

Vectors and Vector -Valued Functions: For a given curve, determine the unit tangent, unit normal, unit binormal and curvature.

Functions of Several Variables: Determine the equation of a plane in 3-space using both the vector form and the scalar form.

Functions of Several Variables: Write the equation for a given quadratic surface.

Functions of Several Variables: Draw accurate and useful renditions of a surface given an equation by hand and using appropriate graphing application software.

Functions of Several Variables: Use graphs of level curves (contour maps) to obtain information about an arbitrary surface.

Functions of Several Variables: Determine limits of functions of several variables using numerical, algebraic and graphical methods.

Functions of Several Variables: Determine continuity or discontinuity of functions of several variables.

Functions of Several Variables: Find the first and second partial derivatives of functions using differentiation rules.

Functions of Several Variables: Determine the gradient and directional derivatives for a function of several variables.

Functions of Several Variables: Use the appropriate chain rule to differentiate composite functions of several variables.

Functions of Several Variables: Use the gradient and directional derivatives to find instantaneous rates of change and related rates of change in application problems.

Functions of Several Variables: Use the gradient and directional derivatives and the Second Partials Test to find properties of functions of several variables: maxima and minima and saddle points, and use this information to sketch the graph of functions.

Functions of Several Variables: Solve optimization problems using the method of Lagrange Multipliers.

Functions of Several Variables: Use the gradient and tangent plane to determine the linear approximation of a function of several variables.

Integration of Functions of Several Variables: Integrate functions of 2 variables over regions in the xy-plane using Riemann sums and iterated integrals with respect to rectangular and/or polar coordinates.

Integration of Functions of Several Variables: Integrate functions of 3 variables over 3-dimensional regions using Riemann sums and iterated integrals with respect to rectangular, cylindrical, or spherical coordinates.

Integration of Functions of Several Variables: Use multiple integrals to solve application problems involving areas, volumes, masses, first and second moments, centers of mass, and moments of inertia.

Vector Fields: Sketch vector fields by hand.

Vector Fields: Interpret vector fields as models of fluid flow.

Vector Fields: Compute line integrals over curves in 2- or 3-space.

Vector Fields: Determine whether a vector field is conservative or not.

Vector Fields: Use the Fundamental Theorem for Line Integrals to compute line integrals under appropriate conditions.

Vector Fields: Use Green's Theorem in the plane in flux form or in circulation form to compute line integrals.

Vector Fields: Compute the 2-dimensional divergence and curl for a vector field in 2-dimensions.

Vector Fields: Use line integrals to solve application problems involving work, mass, circulation and heat flux.

Vector Fields: Compute the 3-dimensional divergence and curl for a vector field in 3-dimensions.

Vector Fields: Compute surface integrals of scalar-valued functions.

Vector Fields: Compute surface integrals of vector fields.

Vector Fields: Use Stokes' Theorem to evaluate line and surface integrals.

Vector Fields: Use the Divergence Theorem to calculate flux.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement

- All students will be required to complete a comprehensive final examination that assesses the learning of all course objectives. This final exam must be weighted in a manner so that this exam score is worth a minimum of twenty percent (20%) of the final course grade. In selected semesters this final exam may be a common final exam administered to all sections of MATH280 Calculus III.
- A minimum of 60% of the course grade must come from at least three proctored in-person paper exams (including the final exam).
- The final exam must be a proctored paper exam. The final exam must meet the minimum departmental percent but not be worth more than 40% of the final course grade.
- All students will be required to complete online homework. This online homework must be weighted in such a manner so that it is worth between six percent (6%) and twelve percent (12%) of the final course grade.
- Additional assessment of student achievement may include assignments, quizzes, projects, and exams.
- *Attendance* is defined as presence. While regular engagement is critical for student success, no grade-bearing credit shall be awarded solely for attendance.
- *Participation* (also referred to as engagement) is defined as the completion of an academic activity. To ensure that course grades continue to primarily reflect activities that lead to or demonstrate mastery of the mathematics curriculum, participation may account for no more than 10% of the overall course grade in all Mathematics Department courses.
- For proctored in-person formal assessments (quizzes, tests, and exams) the only technology students can use is a non-graphing scientific calculator. Quizzes, tests, and exams may have non-calculator parts. Class projects and informal assessments will require students to use a free graphing application to support learning.
- All relevant application problems must be assessed throughout the semester. Application problems must be included in the final exam.

General Course Requirements and Recommendations

- A non-graphing scientific calculator is required for formal assessments.
- Free graphing applications (such as DP-Graph Computer program, 3D-GeoGebra, or other free 3D graphing software) will be used to support learning, informal assessments, and class work.
- Access to an online homework management system is also required.
- Application problems must be covered in all mathematics courses.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for MATH 280

MATH283 - Linear Algebra

Overview

Subject
Mathematics

Academic Department
Mathematics

School
Science, Tech, Engr & Math

Course Description
Introduces matrix and linear algebra. Covers systems of linear equations, matrix operations and properties of matrices, determinants, the n-dimensional real vector space, general vector spaces, inner product spaces, linear transformations, and eigenvalues and eigenvectors. Presents various applications. Requires a non-graphing scientific calculator for some formal assessments, access to a free graphing utility application to support learning and during informal assessments, and access to an online homework system.

Course Pre-requisite(s)
MATH183 Calculus II with a C or better

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
62

Total Student Contact Hours:
62

Course Fee
10

Academic Level
Undergraduate

General Education Category
Mathematics

Michigan Transfer Agreement (MTA) Category
Category 3: Mathematics - Applied Degrees, Category 3: Mathematics - Transfer Degrees - College Algebra Track

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other Exam

Credit for Prior College Level Learning (CPCLL) Details
Other Exam Details

A student may receive credit for MATH283 Linear Algebra by earning at least 5 on the International Baccalaureate-Higher Level (IB-HL) Further Mathematics Exam.

Goals, Topics, and Objectives

Course Goals

1. To provide an introduction to the concepts and techniques of linear algebra and matrix algebra for students of engineering, mathematics, the physical sciences, and the social sciences.
2. To illustrate some of the widespread applications of matrix algebra and linear algebra.
3. To demonstrate the axiomatic method in the context of matrix theory and vector space theory.

Core Course Topics

1. Systems of Linear Equations
    1. Solve a system of linear equations using Gaussian elimination or Gaussian elimination with back-substitution.
    2. Solve a homogeneous system of linear equations.
    3. Determine whether a matrix is in row-echelon or reduced-row-echelon form.
    4. Use elementary row operations on an augmented matrix, perhaps combined with back-substitution, to solve a system of linear equations.
    5. Set up and solve a system of equations to fit a polynomial function to a set of data points.
    6. Write and solve a system of linear equations in the form Ax = b.
2. Matrices
    1. Use properties of matrix operations to solve matrix equations.
    2. Find the transpose of a matrix, the inverse of a matrix, and the inverse of a matrix product (if they exist).
    3. Factor a matrix into a product of elementary matrices.
    4. Complete proofs involving matrix properties and operations.
    5. Solve an application problem involving stochastic matrices, cryptography, input-output models, or least-squares regression (two of these four).
3. Determinants
    1. Use expansion by cofactors to find the determinant of a matrix.
    2. Use elementary row or column operations to evaluate the determinant of a matrix.
    3. State conditions that yield zero determinants.
    4. Find the determinants of elementary and triangular matrices.
    5. Use the determinant to determine whether a matrix is singular or nonsingular.
    6. Recognize equivalent conditions for a nonsingular matrix.
    7. Complete proofs involving determinant properties and operations.
4. Vector Spaces
    1. Perform vector operations on vectors in R^n.
    2. Prove or disprove that a given set of vectors with two operations is a vector space.
    3. Prove or disprove that a given subset W of a vector space V is a subspace of V.
    4. Write a linear combination of a finite set of vectors from a vector space V.
    5. Determine whether a set S of vectors in a vector space V spans V.
    6. Determine whether a set S of vectors in a vector space V is linearly independent.
    7. Determine whether a set S of vectors in a vector space V is a basis for V.
    8. State standard bases for the vector spaces R^n, Mm,n, and Pn.
    9. Find a basis for, and the dimension of, the column space or row space of a matrix.
    10. Find a basis for, and the dimension of, the nullspace of a matrix.
    11. Express the general solution of a consistent system Ax = b in the form xp + xh.
    12. Find the transition matrix from a basis B to a different basis B' in R^n.
    13. Find the coordinate vector for a vector in a vector space V with respect to a nonstandard basis.
    14. Apply the concept of linear independence to find the general solution of a differential equation or apply the concept of a transition matrix to perform a rotation of axes to graph a conic section (one of these two).
5. Inner Product Spaces
    1. Find the length of a vector and a unit vector in the same direction as (or in the opposite direction from) a vector.
    2. Given two vectors, find the distance between them, their dot product, and the angle between them.
    3. Determine whether two vectors are orthogonal, parallel, or neither.
    4. Prove or disprove that a given function defines an inner product on a vector space.
    5. Find the inner product of two vectors.
    6. Find the projection of a vector onto a vector or subspace.
    7. Determine whether a set of vectors is orthogonal, orthonormal, or neither.
    8. Find the coordinates of a vector relative to an orthonormal basis.
    9. Use the Gram-Schmidt orthonormalization process.
    10. Find an orthonormal basis for the solution space of a homogeneous system.
    11. Find the QR-factorization of an m x n matrix of rank n.
6. Linear Transformations
    1. Prove or disprove that a given function from one vector space to another is a linear transformation.
    2. Find the image and preimage of a vector under a linear transformation.
    3. Find the kernel, the range, and the bases for the kernel and the range of a linear transformation T, and determine the nullity and rank of T.
    4. Determine whether a linear transformation is one-to-one or onto.
    5. Determine whether two vector spaces are isomorphic.
    6. Find the standard matrix for a linear transformation.
    7. Use the standard matrix for a linear transformation to find the image of a vector.
    8. Find the standard matrix of a composition of two linear transformations.
    9. Determine whether a linear transformation is invertible, and find its inverse if it exists.
    10. Find the matrix of a linear transformation relative to a nonstandard basis.
    11. Use the definition and properties of similar matrices.
    12. Identify linear transformations defined by reflections, expansions, contractions, shears, and/or rotations.
7. Eigenvalues and Eigenvectors
    1. Find the characteristic equation and the eigenvalues and corresponding eigenvectors of a matrix A.
    2. Determine whether a matrix is diagonalizable or orthogonal.
    3. Find a nonsingular matrix P that diagonalizes a matrix A (if possible).
    4. Find, if possible, a basis B for the domain of a linear transformation T such that the matrix of T relative to B is diagonal.
    5. Find the eigenvalues of a symmetric matrix and determine the dimension of the corresponding eigenspace.
    6. Find an orthogonal matrix P that diagonalizes A.
    7. Use an age transition matrix to solve a population problem, solve a system of first-order linear differential equations, find a matrix of the quadratic form associated with a quadratic equation, or perform a rotation of axes to rotate a quadric surface (two of these four).

Systems of Linear Equations: Solve a system of linear equations using Gaussian elimination or Gaussian elimination with back-substitution.
Systems of Linear Equations: Solve a homogeneous system of linear equations.
Systems of Linear Equations: Determine whether a matrix is in row-echelon or reduced-row-echelon form.
Systems of Linear Equations: Use elementary row operations on an augmented matrix, perhaps combined with back-substitution, to solve a system of linear equations.
Systems of Linear Equations: Set up and solve a system of equations to fit a polynomial function to a set of data points.
Systems of Linear Equations: Write and solve a system of linear equations in the form Ax = b.
Matrices: Use properties of matrix operations to solve matrix equations.
Matrices: Find the transpose of a matrix, the inverse of a matrix, and the inverse of a matrix product (if they exist).
Matrices: Factor a matrix into a product of elementary matrices.
Matrices: Complete proofs involving matrix properties and operations.
Matrices: Solve an application problem involving stochastic matrices, cryptography, input-output models, or least-squares regression (two of these four).
Determinants: Use expansion by cofactors to find the determinant of a matrix.
Determinants: Use elementary row or column operations to evaluate the determinant of a matrix.
Determinants: State conditions that yield zero determinants.
Determinants: Find the determinants of elementary and triangular matrices.
Determinants: Use the determinant to determine whether a matrix is singular or nonsingular.
Determinants: Recognize equivalent conditions for a nonsingular matrix.

Determinants: Complete proofs involving determinant properties and operations.

Vector Spaces: Perform vector operations on vectors in R^n.

Vector Spaces: Prove or disprove that a given set of vectors with two operations is a vector space.

Vector Spaces: Prove or disprove that a given subset W of a vector space V is a subspace of V.

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Vector Spaces: Determine whether a set S of vectors in a vector space V spans V.

Vector Spaces: Determine whether a set S of vectors in a vector space V is linearly independent.

Vector Spaces: Determine whether a set S of vectors in a vector space V is a basis for V.

Vector Spaces: State standard bases for the vector spaces R^n, Mm,n, and Pn.

Vector Spaces: Find a basis for, and the dimension of, the column space or row space of a matrix.

Vector Spaces: Find a basis for, and the dimension of, the nullspace of a matrix.

Vector Spaces: Express the general solution of a consistent system Ax = b in the form xp + xh.

Vector Spaces: Find the transition matrix from a basis B to a different basis B′ in R^n.

Vector Spaces: Find the coordinate vector for a vector in a vector space V with respect to a nonstandard basis.

Vector Spaces: Apply the concept of linear independence to find the general solution of a differential equation or apply the concept of a transition matrix to perform a rotation of axes to graph a conic section (one of these two).

Inner Product Spaces: Find the length of a vector and a unit vector in the same direction as (or in the opposite direction from) a vector.

Inner Product Spaces: Given two vectors, find the distance between them, their dot product, and the angle between them.

Inner Product Spaces: Determine whether two vectors are orthogonal, parallel, or neither.

Inner Product Spaces: Prove or disprove that a given function defines an inner product on a vector space.

Inner Product Spaces: Find the inner product of two vectors.

Inner Product Spaces: Find the projection of a vector onto a vector or subspace.

Inner Product Spaces: Determine whether a set of vectors is orthogonal, orthonormal, or neither.

Inner Product Spaces: Find the coordinates of a vector relative to an orthonormal basis.

Inner Product Spaces: Use the Gram-Schmidt orthonormalization process.

Inner Product Spaces: Find an orthonormal basis for the solution space of a homogeneous system.

Inner Product Spaces: Find the QR-factorization of an m x n matrix of rank n.

Linear Transformations: Prove or disprove that a given function from one vector space to another is a linear transformation.

Linear Transformations: Find the image and preimage of a vector under a linear transformation.

Linear Transformations: Find the kernel, the range, and the bases for the kernel and the range of a linear transformation T, and determine the nullity and rank of T.

Linear Transformations: Determine whether a linear transformation is one-to-one or onto.

Linear Transformations: Determine whether two vector spaces are isomorphic.

Linear Transformations: Find the standard matrix for a linear transformation.

Linear Transformations: Use the standard matrix for a linear transformation to find the image of a vector.

Linear Transformations: Find the standard matrix of a composition of two linear transformations.

Linear Transformations: Determine whether a linear transformation is invertible, and find its inverse if it exists.

Linear Transformations: Find the matrix of a linear transformation relative to a nonstandard basis.

Linear Transformations: Use the definition and properties of similar matrices.

Linear Transformations: Identify linear transformations defined by reflections, expansions, contractions, shears, and/or rotations.

Eigenvalues and Eigenvectors: Find the characteristic equation and the eigenvalues and corresponding eigenvectors of a matrix A.

Eigenvalues and Eigenvectors: Determine whether a matrix is diagonalizable or orthogonal.

Eigenvalues and Eigenvectors: Find a nonsingular matrix P that diagonalizes a matrix A (if possible).

Eigenvalues and Eigenvectors: Find, if possible, a basis B for the domain of a linear transformation T such that the matrix of T relative to B is diagonal.

Eigenvalues and Eigenvectors: Find the eigenvalues of a symmetric matrix and determine the dimension of the corresponding eigenspace.

Eigenvalues and Eigenvectors: Find an orthogonal matrix P that diagonalizes A.

Eigenvalues and Eigenvectors: Use an age transition matrix to solve a population problem, solve a system of first-order linear differential equations, find a matrix of the quadratic form associated with a quadratic equation, or perform a rotation of axes to rotate a quadric surface (two of these four).

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement

- All students will be required to complete a comprehensive final examination that assesses the learning of all course objectives. This final exam must be weighted in a manner so that this exam score is worth a minimum of twenty percent (20%) of the final course grade. In selected semesters this final exam may be a common final exam administered to all sections of MATH283 Linear Algebra.
- A minimum of 60% of the course grade must come from at least three proctored in-person paper exams (including the final exam).
- The final exam must be a proctored paper exam. The final exam must meet the minimum departmental percent but not be worth more than 40% of the final course grade.
- All students will be required to complete online homework. This online homework must be weighted in such a manner so that it is worth between six percent (6%) and twelve percent (12%) of the final course grade.
- Additional assessment of student achievement may include assignments, quizzes, projects, and exams.
- *Attendance* is defined as presence. While regular engagement is critical for student success, no grade-bearing credit shall be awarded solely for attendance.
- *Participation* (also referred to as engagement) is defined as the completion of an academic activity. To ensure that course grades continue to primarily reflect activities that lead to or demonstrate mastery of the mathematics curriculum, participation may account for no more than 10% of the overall course grade in all Mathematics Department courses.
- For proctored in-person formal assessments (quizzes, tests, and exams) the only technology students can use is a non-graphing scientific calculator. Quizzes, tests, and exams may have non-calculator parts. In some classes, projects and informal assessments may require students to use a free graphing application to support learning.

General Course Requirements and Recommendations assessed throughout the semester. Application problems must be included in the final exam.

- A non-graphing scientific calculator is required for proctored in-person formal assessments.
- Free graphing applications will be used to support learning, informal assessments, and class work.
- Access to an online homework management system is also required.
- Application problems must be covered in all mathematics courses.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for MATH 283

MATH288 - Differential Equations

Overview

Subject
Mathematics

Academic Department
Mathematics

School
Science, Tech, Engr & Math

Course Description
Introduces ordinary differential equations by means of algebraic, numerical, and graphical analysis (including phase-plane analysis). Examines first order differential equations, second and higher order linear equations, methods for nonhomogeneous second order equations, series solutions, Laplace transforms, linear systems, and linearization of nonlinear systems. Covers various applications throughout the course. Requires a non-graphing scientific calculator for some formal assessments, access to a free graphing utility application to support learning and during informal assessments, and access to an online homework system.

Course Pre-requisite(s)
MATH280 Calculus III with a C or better OR concurrent enrollment in MATH280 Calculus III

Credit Hours
5

Total Contact Hours
Total Instructor Contact Hours:
77

Total Student Contact Hours:
77

Course Fee
10

Academic Level
Undergraduate

General Education Category
Mathematics

Michigan Transfer Agreement (MTA) Category
Category 3: Mathematics - Applied Degrees, Category 3: Mathematics - Transfer Degrees - College Algebra Track

Goals, Topics, and Objectives

Course Goals

1. To provide an introduction to the nature and significance of differential equations for students of engineering, mathematics, and science.
2. To demonstrate various applications of differential equations to problems from the physical sciences and engineering.
3. To provide methods for solving differential equations that have proved useful in a wide variety of applications.
4. To present an exposition of differential equations that incorporates algebraic, numerical and graphical analysis, without undue emphasis on theoretical abstraction or routine mechanical manipulation.
5. To use technology to graph solutions of ordinary differential equations (ODEs) and to do explorations and projects involving ODEs.

Core Course Topics

1. Introduction to Differential Equations
    1. Determine the order of a differential equation and whether it is linear or nonlinear.
    2. Verify that a function or family of functions solves a differential equation.
    3. Determine parameter values such that a member of a family of solutions solves a given initial-value problem.
2. First-Order Differential Equations
    1. Relate a solution curve to the direction field for a differential equation.
    2. Solve a separable differential equation.
    3. Solve a first-order linear differential equation.
    4. Solve an exact differential equation.
    5. Use an appropriate substitution to rewrite and solve a differential equation.
    6. Apply Euler's Method to obtain a numerical approximation of a differential-equation solution-function value.
3. Higher-Order Differential Equations
    1. Verify that a set of functions is a fundamental set of solutions of a differential equation.
    2. Use reduction of order to find a second solution of a second-order differential equation given one solution.
    3. Solve a homogeneous linear differential equation with constant coefficients.
    4. Apply the method of undetermined coefficients to solve a nonhomogeneous linear differential equation with constant coefficients.
    5. Apply the method of variation of parameters to solve a linear second-order differential equation.
    6. Solve a Cauchy-Euler equation.
4. Series Solutions of Linear Equations
    1. Find a Taylor-series solution of an initial-value problem.
    2. Find power-series solutions of a differential equation about an ordinary point.
5. Modeling with Differential Equations
    1. Solve a problem in the physical sciences (such as a growth or decay problem, a mixture problem, or a Newton's Law of Cooling problem) whose solution utilizes a first-order linear differential equation.
    2. Solve a problem in the physical sciences (such as a spring/mass-system problem) whose solution utilizes a second-order linear differential equation.
    3. Solve a problem in the sciences (such as a logistic-growth problem) whose solution utilizes a nonlinear differential equation.
    4. Solve a problem in the sciences (such as a connected-mixing-tanks problem or a predator-prey problem) whose solution utilizes a system of differential equations.
6. The Laplace Transform
    1. Calculate the Laplace transform of a function using the definition of Laplace transform.
    2. Use algebraic manipulation or a table to find the Laplace transform of a function or its derivatives.
    3. Use algebraic manipulation or a table to find an inverse Laplace transform.
    4. Use the Laplace transform to solve an initial-value problem.
    5. Use the Laplace transform to solve a system of linear differential equations.
7. Systems of Differential Equations
    1. Solve a system of linear differential equations by elimination.
    2. Solve a system of linear differential equations by elimination using the Laplace transform.
    3. Solve a system of linear differential equations using the eigenvalue method.
    4. Analyze the phase plane for a linear system.
    5. Linearize a nonlinear system of differential equations.

Introduction to Differential Equations: Determine the order of a differential equation and whether it is linear or nonlinear.

Introduction to Differential Equations: Verify that a function or family of functions solves a differential equation.

Introduction to Differential Equations: Determine parameter values such that a member of a family of solutions solves a given initial-value problem.

First-Order Differential Equations: Relate a solution curve to the direction field for a differential equation.

First-Order Differential Equations: Solve a separable differential equation.

First-Order Differential Equations: Solve a first-order linear differential equation.

First-Order Differential Equations: Solve an exact differential equation.

First-Order Differential Equations: Use an appropriate substitution to rewrite and solve a differential equation.

First-Order Differential Equations: Apply Euler's method to obtain a numerical approximation of a differential-equation solution-function value.

Higher-Order Differential Equations: Verify that a set of functions is a fundamental set of solutions of a differential equation.

Higher-Order Differential Equations: Use reduction of order to find a second solution of a second-order differential equation given one solution.

Higher-Order Differential Equations: Solve a homogeneous linear differential equation with constant coefficients.

Higher-Order Differential Equations: Apply the method of undetermined coefficients to solve a nonhomogeneous linear differential equation with constant coefficients.

Higher-Order Differential Equations: Apply the method of variation of parameters to solve a linear second-order differential equation.

Higher-Order Differential Equations: Solve a Cauchy-Euler equation.

Series Solutions of Differential Equations: Find a Taylor-series solution of an initial-value problem.

Series Solutions of Differential Equations: Find power-series solutions of a differential equation about an ordinary point.

Modeling with Differential Equations: Solve a problem in the physical sciences (such as a growth or decay problem, a mixture problem, or a Newton's Law of Cooling problem) whose solution utilizes a first-order linear differential equation.

Modeling with Differential Equations: Solve a problem in the physical sciences (such as a spring/mass-system problem) whose solution utilizes a second-order linear differential equation.

Modeling with Differential Equations: Solve a problem in the sciences (such as a logistic-growth problem) whose solution utilizes a nonlinear differential equation.

Modeling with Differential Equations: Solve a problem in the sciences (such as a connected-mixing-tanks problem or a predator-prey problem) whose solution utilizes a system of differential equations.

The Laplace Transform: Calculate the Laplace transform of a function using the definition of Laplace transform.

The Laplace Transform: Use algebraic manipulation or a table to find the Laplace transform of a function or its derivatives.

The Laplace Transform: Use algebraic manipulation or a table to find an inverse Laplace transform.

The Laplace Transform: Use the Laplace transform to solve an initial-value problem.

The Laplace Transform: Use the Laplace transform to solve a system of linear differential equations.

Systems of Differential Equations: Solve a system of linear differential equations by elimination.

Systems of Differential Equations: Solve a system of linear differential equations by elimination using the Laplace transform.

Systems of Differential Equations: Solve a system of linear differential equations using the eigenvalue method.

Systems of Differential Equations: Analyze the phase plane for a linear system.

Systems of Differential Equations: Linearize a nonlinear system of differential equations.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement

- All students will be required to complete a comprehensive final examination that assesses the learning of all course objectives. This final exam must be weighted in a manner so that this exam score is worth a minimum of twenty percent (20%) of the final course grade. In selected semesters this final exam may be a common final exam administered to all sections of MATH288 Differential Equations.
- A minimum of 60% of the course grade must come from at least three proctored in-person paper exams (including the final exam).
- The final exam must be a proctored paper exam. The final exam must meet the minimum departmental percent but not be worth more than 40% of the final course grade.
- All students will be required to complete online homework. This online homework must be weighted in such a manner so that it is worth between six percent (6%) and twelve percent (12%) of the final course grade.
- Additional assessment of student achievement may include assignments, quizzes, projects, and exams.
- *Attendance* is defined as presence. While regular engagement is critical for student success, no grade-bearing credit shall be awarded solely for attendance.
- *Participation* (also referred to as engagement) is defined as the completion of an academic activity. To ensure that course grades continue to primarily reflect activities that lead to or demonstrate mastery of the mathematics curriculum, participation may account for no more than 10% of the overall course grade in all Mathematics Department courses.
- For proctored in-person formal assessments (quizzes, tests, and exams) the only technology students can use is a non-graphing scientific calculator. Quizzes, tests, and exams may have non-calculator parts. In some classes, projects and informal assessments may require students to use a free graphing application to support learning.
- All relevant application problems must be assessed throughout the semester. Application problems must be included in the final exam.

General Course Requirements and Recommendations

- A non-graphing scientific calculator is required for proctored in-person formal assessments.
- Free graphing applications will be used to support learning, informal assessments, and class work.
- Access to an online homework management system is also required.
- Application problems must be covered in all mathematics courses.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for MATH 288

MCA131 - Intoduction to Media Communication

Overview

Subject
Media Communication Arts

Academic Department
Media Communication Arts

School
Liberal Arts

Course Description
This course explores the role of media and communication in shaping society, culture, and public opinion across digital, social, and print platforms such as books, radio, TV, film, video games, PR, advertising, social media, global media, and more. Through historical, economic, ethical, and cultural perspectives, students will examine how media affects our daily lives and influences our interactions, values, and understanding of the world.

Course Pre-requisite(s)
Eligible to take ENG131 Introduction College Writing at HFC.

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
10

Academic Level
Undergraduate

General Education Category
Humanities and Fine Arts

Michigan Transfer Agreement (MTA) Category
Category 5: Humanities and Fine Arts - Transfer Degrees, Category 5: Humanities and Fine Arts - Applied Degrees

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other Exam, Other

Credit for Prior College Level Learning (CPCLL) Details
Other

Goals, Topics, and Objectives

Course Goals
The goal of this course is to introduce and foster media literacy by examining the history, evolution, and critical issues in electronic, digital, social, and print media. Students will explore how media and communication—particularly in news and entertainment, as shaped by media industries—affect our daily lives, societal values, and global perspectives, equipping them to critically analyze the impact of converging media and communication on culture, public affairs, and ethics.

Core Course Topics

1. Mass Communication, Culture and Media Literacy
2. Convergence and Reshaping of Mass Communication
3. Books
4. Newspapers
5. Magazines
6. Film
7. Radio, Recordings, and Popular Music
8. Television, Cable, and Mobile Video
9. Video Games
10. The Internet and Social Media
11. Public Relations
12. Advertising
13. Theories and Effects of Mass Communication
14. Media Freedom, Regulation, and Ethics
15. Global Media

Define mass communication and relate how media literacy is critical and necessary in all aspects of it

Explain the role of converging media in changing political and cultural dynamics on the local, national and global stage

Illustrate the history of how print communication technologies originated and developed into what they are today (i.e. books, newspapers and magazines)

Illustrate the history of how electronic and digital communication technologies originated and developed into what they are today (i.e. film, radio, recordings, TV, cable and mobile video, social media, video games, Internet and world wide web)

Identify the behind-the-scenes operations and decision-making processes of all major media industries

Compare and contrast a variety of relationships between the media and their audiences and analyze what the role of PR and Advertising has evolved into in the changing times

Justify the general theory that media content provides insight into ourselves and our culture and explain the value and importance in media effects research

Know of the ongoing government regulation of the U.S. media, as well as the constitutional and principles that guide it

Analyze the ethical and philosophical issues that arise in media culture and contrast the range of viewpoints regarding each issue

Develop and assess a realistic world view based on an appropriate plan for media use and compare and differentiate global media with that of U.S. media

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
• Tests/quizzes on key historical events, persons, laws, and theories • Evaluation of topic-based analysis, personal reflection, directed discussion forums, and critical writing assignments

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for MCA 131

MCA132 - Film History and Criticism

Overview

Subject
Media Communication Arts

Academic Department
Media Communication Arts

School
Liberal Arts

Course Description
This course explores the medium of film as an art form, an industry, and a source of entertainment, examining its historical, cultural, and technical evolution. Students will analyze cinematic techniques, genres, and influential movements to assess films' visual and narrative elements, understand cinema's personal, social, and global impact, and appreciate its role in shaping our world-from early movies to contemporary films.

Course Pre-requisite(s)
Eligible to take ENG131 Introduction College Writing at HFC.

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
15

Academic Level
Undergraduate

General Education Category
Humanities and Fine Arts

Michigan Transfer Agreement (MTA) Category
Category 5: Humanities and Fine Arts - Applied Degrees, Category 5: Humanities and Fine Arts - Transfer Degrees

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other Exam, Other

Credit for Prior College Level Learning (CPCLL) Details
Minimum Departmental Exam Score

80.00

Skilled Demonstration Details

Skilled demonstration, given in department by department faculty. Faculty will assess demonstration based on evaluation rubric. Evaluation rubric and student checklist located in The School of Liberal Arts office.

Portfolio Review Details

Portfolio must contain evidence that illustrates competency in all course learning objectives not already measured through the skilled demonstration. Department faculty will evaluate submitted portfolios based on the evaluation rubric. Evaluation rubric and student checklist located in The School of Liberal Arts office.

Goals, Topics, and Objectives

Course Goals
The goal of this course is to provide students with a comprehensive understanding of film as both an art form and an industry by exploring its technical, cultural, and historical, evolution. Through the examination of cinematic techniques, film genres, and powerful movements, students will learn to critically analyze films' visual and narrative elements, understand the social and global impact of cinema, and recognize the shifting landscape from early movies to contemporary filmmaking styles and practices. Ultimately, students will gain a deeper appreciation and enjoyment of film as a medium that reflects and influences our world.

Core Course Topics

1. The nature, magic and verisimilitude of the film experience, including explicit and implicit meaning and analysis
2. The early inventors and their inventions that led to the motion picture
3. The early films and their filmmakers, 1890--1915
4. Genre and the three stages of film production
5. Stages of filmmaking: Production, Distribution and Exhibition
6. Continuity, Narrative, and the Hollywood System, 1915-1930
7. Mise en scene, German Expressionism, and the introduction of "talkies", 1915-1930
8. Montage, Editing and Russia in the 1920's
9. The Hays Code, MPAA and ratings/censorship in film
10. Hollywood's Golden Era, 1930-1950
11. Italian Neo-Realism and the French New Wave, 1945-1965
12. Hollywood, the Rise of Independents and Foreign Films, 1950-1970
13. The New Hollywood and American Independent Films, 1970-1990's
14. Global cinema
15. The business of modern film and the franchise/cinematic universe model of filmmaking

The nature, magic and verisimilitude of the film experience, including explicit and implicit meaning and analysis

The early inventors and their inventions that led to the motion picture

The early films and their filmmakers, 1890--1915

Genre and the three stages of film production

Stages of filmmaking: Production, Distribution and Exhibition

Continuity, Narrative, and the Hollywood System, 1915-1930

Mise en scene, German Expressionism, and the introduction of "talkies", 1915-1930

Montage, Editing and Russia in the 1920's

The Hays Code, MPAA and ratings/censorship in film

Hollywood's Golden Era, 1930-1950

Italian Neo-Realism and the French New Wave, 1945-1965

Hollywood, the Rise of Independents and Foreign Films, 1950-1970

The New Hollywood and American Independent Films, 1970-1990's

Global cinema

The business of modern film and the franchise/cinematic universe model of filmmaking

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
• Quizzes over different areas of history, theory, and techniques • Critical Essays: Personal Film Experience, Feature Film Analysis, Style of a Director • Optional artistic interpretation of presentation on a specific film's explicit or implicit meaning • Short Viewing Reports/Discussion Forums on relevant film topics

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for MCA 132

MCA151 - Digital Audio Editing

Overview

Subject
Media Communication Arts

Academic Department
Media Communication Arts

School
Liberal Arts

Course Description
This course explore the fundamentals of digital audio editing and theory through hands-on projects using professional audio software in the department's computer lab and podcast studios.

Course Pre-requisite(s)
Eligible to take ENG131 Introduction College Writing at HFC. As this is a computer-based course, some basic knowledge of computer operations is highly recommended.

Credit Hours
1

Total Contact Hours
Total Instructor Contact Hours:
16

Total Student Contact Hours:
16

Course Fee
10

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
Other

Goals, Topics, and Objectives

Course Goals
The goal of this course is to provide an introductory tutorial on professional digital audio production software with intermediate to advanced features for multitrack recording, mixing, and output. This software is the key tool for production projects in MCA 251: Audio Production, making this course a co-requisite for MCA 251 and recommended for the first 8 weeks of the semester. Non-MCA 251 students are also welcome to enroll.

Core Course Topics

1. Overview of editing: definition, goals, major historical approaches
2. The hardware needed for digital audio editing
3. The software platform(s) in use: major function and features
4. Industry standards and ethics in editing

Explain the basic definition of Editing: Its purpose, goals and historical approaches

Describe the necessary hardware and software minimally needed to accomplish professional quality digital audio editing

Define and demonstrate the major functional procedure of the computer operating system in use

Identify and give examples of the major features of the software program(s) in use

Demonstrate a knowledge of the major editing capabilities of the software program in use: such as levels and digitizing, editing voices, working with music, sound effects, processing, editing audio for video, and multi-track mixing

Interpret a working knowledge of industry standards and ethics, and justify what is needed for an audio project to be brought to that level

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement

1. Tests, quizzes, or project completion over cognitive areas of hardware, software, and techniques
2. Digital audio editing exercises: recording, cut & paste/trimming, processing, mixdown, and outputting to various digital formats

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for MCA 151

MCA157 - Digital Video Editing

Overview

Subject
Media Communication Arts

Academic Department
Media Communication Arts

School
Liberal Arts

Course Description
This course offers an intensive introduction to digital video editing using industry-standard software in the Media Communication Arts video lab. Students will work on hands-on exercises and projects, exploring both hardware and software applications essential for professional video editing.

Course Pre-requisite(s)
Eligible to take ENG131 Introduction College Writing at HFC. As this is a computer-based course, basic knowledge of computer operations is necessary.

Credit Hours
1

Total Contact Hours
Total Instructor Contact Hours:
16

Total Student Contact Hours:
16

Course Fee
10

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
Other

Goals, Topics, and Objectives

Course Goals
The goal of this course is to provide a foundational introduction to digital video editing using industry-standard software, covering essential editing techniques, tools, and industry practices. Students will gain hands-on experience with editing functions like trimming, transitions, titling, and special effects, as well as explore hardware, software, and operating systems required for professional-quality editing. By understanding historical editing approaches and key industry standards, students will be equipped to produce polished digital video content.

Core Course Topics

1. Overview of editing: definition, goals, major historical approaches
2. The hardware needed for digital video editing
3. The computer operating system and software platform in use: major function and features
4. The software program in use: major functions and features.
5. The three major types of editing: Mise en scene, Continuity, and Montage
6. Industry standards and ethics of video editing

Explain the basic definition of Editing: Its purpose, goals and historical approaches

Describe the necessary hardware and software minimally needed to accomplish professional quality digital video editing

Explain and demonstrate the major functional procedures of the computer operating system in use

Describe and give examples of the major features of the software program in use

Demonstrate knowledge of the major editing capabilities of the software program in use: such as capturing, cut and paste, trimming, transitions, titling, special effects, audio sweetening, and output options such as digital file sharing, cloud storage, and uploading to the Internet

Compare and contrast the three major types of editing: Mise en scene, Continuity, and Montage

Interpret a working knowledge of industry standards and ethics, and evaluate what is needed for a video project to be brought to that level

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement

- Tests/quizzes over cognitive areas of hardware, software, and techniques
- Digital video editing exercises/projects: capturing, cut & paste/trimming, titling/transitions/special effects, audio sweetening, and outputting to various media formats
- Verbal defense and debate of projects and how they relate to current industry standards

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for MCA 157

MCA189 - Introduction to WHFR Radio

Overview

Subject
Media Communication Arts

Academic Department
Media Communication Arts

School
Liberal Arts

Course Description
This course offers an introduction to WHFR-FM, the college's non-commercial, educational broadcast and internet radio station. Students will learn essential station rules, operational procedures, and equipment usage, while developing foundational skills in broadcast writing and on-air announcing, including music, public service, promotional, and/or sports/news. Open to all students, this course is required for those interested in joining the WHFR staff and contributing to station operations and programming. Upon successful completion, students will be eligible to volunteer as WHFR staff members.

Course Pre-requisite(s)
Eligible to take ENG131 Introduction College Writing at HFC. As this is a computer-based course, basic knowledge of computer operations is necessary.

Credit Hours
1

Total Contact Hours
Total Instructor Contact Hours:
16

Total Student Contact Hours:
16

Course Fee
10

Academic Level
Undergraduate

Goals, Topics, and Objectives

Course Goals
The goal of this course is to equip students with essential knowledge and skills for contributing to WHFR-FM, the college's non-commercial, educational radio station. Through understanding WHFR's structure, station rules, and FCC regulations, as well as hands-on experience with studio equipment, students will develop foundational abilities in broadcast writing, on-air announcing, and ethical broadcasting practices.

Core Course Topics
1. WHFR facts and management structure
2. WHFR rules and regulations
3. WHFR studio equipment and utilization
4. Public service and promotional announcements
5. FCC rules and regulations

Identify and describe in detail WHFR facts, WHFR management structure, WHFR rules and regulations, as well as FCC rules and regulations

Operate the key studio recording equipment in a basic way

Access and utilize WHFR digital music server

Write an effective public service and promotional announcement

Identify, interpret and debate the ethical implications of FCC radio broadcast rules and regulation and potential misuse of the WHFR airwaves

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
- Final exam over facts, management, and WHFR and FCC rules and regulations
- Written 30-second PSA and Promo scripts
- New music review with WHFR digital music server or physical media
- Mentoring with a current DJ
- Voice check performance
- Completion of studio floor plan
- Critique of a one hour WHFR program
- Recorded sample DJ show in a specified length

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for MCA 189

MCA235 - Topics in Film and Media

Overview

Subject
Media Communication Arts

Academic Department
Media Communication Arts

School
Liberal Arts

Course Description
Offers special study in an area of film or another media-related medium, organized by theme, genre, historical period, or other criteria. Specific topics are listed in the semester class schedule; see individual course syllabi in the School of Liberal Arts office.

Course Pre-requisite(s)
Eligible to take ENG courses at HFC.

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
15

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics
1. Major aspects of specific filmic or media topic/genre.
2. Historical examination of specific filmic or media topic/genre.
3. Thorough present-day analysis of specific filmic or media topic/genre as it relates to society and today's mass media culture.

Explain history, changes and popularity analysis of specific filmic or media topic/genre

Catogorize, both verbally and in essay form, major aspects of specific filmic or media topic/genre

Defend and debate social relevance and role in today's media culture as it relates to specific filmic or media topic/genre*

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
- Tests/quizzes of covered material through the semester.
- Graded group and individual analysis, both verbal and written, of evaluation on major topics related to genre..

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for MCA 235

MCA241 - Media Writing

Overview

Subject
Media Communication Arts

Academic Department
Media Communication Arts

School
Liberal Arts

Course Description
This course explores techniques and critical analysis involved in media writing across traditional and digital platforms, including scriptwriting for commercials, public service announcements, broadcast and digital content, as well as screenwriting for film and television. Students will gain hands-on experience with industry-standard practices, focusing on impactful and ethical storytelling across cinematic, broadcast, internet, and social media.

Course Pre-requisite(s)
Eligible to take ENG131 Introduction College Writing at HFC As this course utilizes some specialized computer-based software, basic knowledge of computer operations is necessary.

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
15

Academic Level
Undergraduate

General Education Category
Humanities and Fine Arts

Michigan Transfer Agreement (MTA) Category
Category 5: Humanities and Fine Arts - Applied Degrees, Category 5: Humanities and Fine Arts - Transfer Degrees

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
Other

Goals, Topics, and Objectives

Course Goals
The goal of this course is to equip students with essential skills in media and screenwriting, focusing on writing techniques for radio, TV, film, and digital platforms. Students will analyze industry trends, practice professional scriptwriting and screenwriting mechanics, and critically evaluate media content, preparing them to create impactful, ethically informed work across various media formats.

Core Course Topics

1. Fundamentals of Media Writing
2. Writing for Radio, Digital Audio, and Podcasts
3. Writing for Television and Digital Video
4. Storyboarding
5. Public Service Announcements (PSAs) and Campaigns for Broadcast and Social Media
6. Concept development for TV and Film storytelling
7. Crafting Loglines for TV, Film, and Online Content
8. Adapting Source Material for Screen
9. Dramatic Script Development: Treatment and First Act Excerpts
10. Blogs and Other Forms of Digital Storytelling

Identify and differentiate between major formats in radio, film, broadcast, copy, and scriptwriting

Learn and apply the mechanics of scriptwriting across different media platforms

Create industry-standard commercials and campaigns for radio, television, and digital media

Analyze current industry trends, content, and practices in commercial media advertising

Understand and critically evaluate motives, biases, and stereotypes in media creation

Develop public service campaigns and announcements for radio, television, and online platforms

Apply ethical principles and rules specific to writing for media, including political advertising

Analyze and apply traditional dramatic elements and story structures in broadcast and film, including character development, dialogue, and scene creation

Analyze popular films/TV shows for screenplay content, trends, and narrative techniques, including Three-Act Structure

Craft a professional treatment/synopsis for television or feature film

Adapt existing work into suitable storytelling devices

Apply screenplay mechanics, formatting and style to craft appropriate film/tv scenes

Compose and justify key components of Act 1 of a film script or TV pilot using current professional screenwriting software

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
• Graded typed scripts for radio, TV, broadcast, and internet, including commercial, promotional, and public service announcements, in proper format • Graded collaborative writing and presentation of commercial campaign and script • Quizzes on related materials • Creation of successful storyboard and copy platform/broadcast campaign • Blog concept and execution of first post • Podcast concept, introduction, and sample short episode creation • Participation in discussions and analysis of media writing across broadcast, digital, and internet platforms, based on real-world examples • Participation in discussions and analysis of TV and film examples, including industry trends and screenwriting techniques

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for MCA 241

MCA243 - Media Performance

Overview

Subject
Media Communication Arts

Academic Department
Media Communication Arts

School
Liberal Arts

Course Description
This course offers experience in media performance, focusing on techniques for effective communication in front of the camera and microphone. Students will develop skills in announcing, interviewing, voiceover, and on-camera performance, building confidence in vocal delivery, body language, and character portrayal within a professional media studio environment. Emphasis is placed on industry standards, studio protocol, and adaptability across a variety of audio and visual media platforms, including independent and social media performance roles. Additionally, this class offers insights for those students interested in directing or producing to collaborate effectively with talent, and for media writers to explore the performance side of character development.

Course Pre-requisite(s)
Eligible to take ENG131 Introduction College Writing at HFC.

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
25

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
Other

Goals, Topics, and Objectives

Course Goals
The goal of this course is to prepare students with essential skills for media performance across voice, camera, and broadcast platforms. Emphasizing vocal techniques, news and entertainment script interpretation, character development, and announcing/voiceover/acting skills, students will strengthen their industry knowledge, audition preparation, and equipment navigation, gaining confidence in the media studio environment. Through hands-on practice and ensemble work in diverse audio and visual performances, they will build professionalism, ethical awareness, and adaptability for impactful media performances in front of the camera and microphone.

Core Course Topics
1. Voice Development and Vocal Techniques
2. Studio Protocol, Mic Techniques, Warm-ups, and Level Checks
3. Voicing Audio Commercials & Promo/Public Service Announcing
4. Character Voice Development and Performance
5. Doubles, Tags, and Effective Voiceover styles for Broadcast
6. News Delivery for Radio, TV, and Digital Platforms
7. Performing in Front of the Camera With Floor Manager/Director Support
8. Interviewing Skills for Broadcast Journalists/Talk Show/Podcast Hosts
9. Ensemble Performance: News, Talk Show, or Interview Segment
10. Interpreting and Performing TV and/or Film Scenes
11. Auditions, Unions, Demos, and Marketing Yourself in the Business
12. Industry Roles and Emerging Trends in Media Performance
13. The Business of Media Performance: Standards, Ethics, and Professional Practices

Develop and apply core vocal and visual techniques for effective media performances

Apply studio protocols including mic technique, warm-ups, timing, and level checks to enhance on-mic and on-camera presence

Analyze and interpret a range of industry roles and emerging trends by working with various media scripts, reflection and self-critique, and building adaptability and professionalism as a media talent

Prepare and perform diverse radio and broadcast scripts—including commercials, PSAs, tags, doubles, and news segments—using industry-standard delivery styles

Explore the art of character creation and voiceover for animation, gaming, audiobooks, and other digital media

Navigate teleprompter and memorized scripts for television and visual media, such as commercials, PSAs, news, and dramatic scenes, demonstrating proficiency across multiple formats

Engage in ensemble performance for a news, talk show, or interview segment, applying interviewing skills and delivering effective introductions and conclusions

Analyze and perform scenes for film or TV with attention to character interpretation, articulating choices in performance style and narrative impact

Identify and evaluate ethical, social, and professional standards in the media performance industry, recognizing the business's effects on individuals and society

Explore the practical aspects of media performance, including auditions, unions, demos, and self-marketing strategies

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement

- Comprehensive Mid-Term and Final Exam on the pertinent theoretical and critical knowledge
- Participation of class discussion, constructive critiques, and analysis of the industry and its key players, through the use of examples, research, and popular opinion
- Critiques, both verbal and written of each individual and group performance as they take place with emphasis on student self-analysis as well as instructor critique and grading to industry standard
- Overall review of portfolio of work performed

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for MCA 243

MCA251 - Audio Production

Overview

Subject
Media Communication Arts

Academic Department
Media Communication Arts

School
Liberal Arts

Course Description
This course introduces students to professional audio recording and production techniques, including microphone setup, digital multi-track editing, and mixing. Using industry-standard software, students will complete hands-on projects to develop foundational skills in audio programming and production.

Course Pre-requisite(s)
Eligible to take ENG131 Introduction College Writing at HFC. MCA151 Digital Audio Editing (to be taken either in advance or in the 1st 8 weeks of the corresponding semester). As some components of this course are computer-based, knowledge of basic computer operation is necessary.

Course Co-requisite(s)
MCA151 Digital Audio Editing (to be taken in the 1st 8 weeks of the corresponding semester).

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
35

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
Other

Goals, Topics, and Objectives

Course Goals
The goal of this course is to provide students with foundational skills and knowledge in audio production, focusing on sound principles, digital recording, and multitrack production techniques. Students will learn to operate key equipment—including microphones, consoles, and digital audio workstations—while developing practical skills in mixing, editing, and project planning. Emphasis is placed on understanding the impact of audio in mass media and evaluating media literacy in the sound production industry.

Core Course Topics

1. Sound & Hearing
2. Microphones & Miking
3. Consoles & Mixing
4. Analog vs Digital Production
5. Digital Recording Formats
6. The Computer as a Digital Studio and Audio Programming
7. Multitrack Digital Production
8. Saving and Editing Digital Audio Projects
9. Media Literacy in the Business of Sound
10. Foley Sound Creation

Identify and explain elementary principles of sound creation, transmission, and interpretation
Identify and operate a variety of digital audio production equipment: microphones and miking
Identify and operate a variety of digital audio production equipment: consoles and mixing
Evaluate the differences between analog and digital production formats
Describe the major recording formats and the advantages of each
Produce a basic digital short in a recorded segment
Explore Foley sound creation
Plan multitrack digital recording project
Execute multitrack digital recording project
Illustrate the basic saving and editing techniques for audio projects
Evaluate the role of audio in mass media and its effect on media literacy/ believability of media content

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement

- Test/quiz over each content area
- Production projects, including Commercial/PSA, Audio for Video Exercise, Digital Cut & Paste Exercise, Interview Recording and Editing Project, and Digital multi-track Recording and Mix

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for MCA 251

MCA257 - Video Production

Overview

Subject
Media Communication Arts

Academic Department
Media Communication Arts

School
Liberal Arts

Course Description
This course introduces the fundamental concepts and skills of film and video production, covering the entire production process from planning to editing. Emphasis is placed on key equipment and essential techniques, with an exploration of the unique aspects of different media formats. Students will complete individual and group projects, working both in the studio and on location to gain hands-on experience.

Course Pre-requisite(s)
Eligible to take ENG131 Introduction College Writing at HFC. MCA157 Digital Video Editing (to be taken in advance or in the 1st 8 weeks of the corresponding semester). As some components of this course are computer-based, knowledge of basic computer operation is necessary.

Course Co-requisite(s)
MCA157 Digital Video Editing (to be taken in the 1st 8 weeks of the corresponding semester).

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
62

Total Student Contact Hours:
62

Course Fee
50

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
Other

Goals, Topics, and Objectives

Course Goals
The goal of this course is to provide students with a foundational understanding of film and video production, focusing on key equipment and essential techniques throughout the production process. Students will explore various production formats, lighting, camera operation, and editing skills while examining industry roles, ethical standards, and current trends. Through hands-on individual and group projects in both studio and location settings, students will gain practical experience and insight into the professional world of video production.

Core Course Topics
1. Film & Video Formats
2. Basic Script Requirements
3. Cameras & Lenses
4. Basic Lighting
5. Location Production
6. Studio Production
7. Editing
8. Individual Project Management
9. Industry Analysis and Careers in the Field
10. Media Ethics and Standards in Video

- Contrast the differences between the various film and video production formats
- Reconstruct a script using basic script requirements
- Explain the principles of the video camera and its professional use
- Assess appropriate lighting scenarios for specific shoots
- Discuss the essential elements of the various jobs on the production team, for both location and studio assignments
- Organize and execute at least one short video production
- Explain and demonstrate the basic principles of creative editing
- Analyze the industry through current trends and assess the various jobs in the field
- Critique the role of mass media as it relates to film and video standards, current trends and ethical/moral issues

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
- Tests/quizzes on the pertinent theoretical and critical knowledge
- Graded individual projects, group work, and group presentation analysis
- Review of portfolio of video work produced

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for MCA 257

MCA258 - Advanced Media Production

Overview

Subject
Media Communication Arts

Academic Department
Media Communication Arts

School
Liberal Arts

Course Description
This course is designed to build on foundational knowledge and equip students with advanced tools to further develop their skills in multimedia production. Through hands-on projects such as drone, gimbal, and glide camera operation, students will explore advanced techniques in shooting, lighting, editing, and special effects across specialized formats for news, entertainment, and education, working both on location and in studio settings.

Course Pre-requisite(s)
Eligible to take ENG131 Introduction College Writing at HFC. MCA157 Digital Video Editing and MCA257 Video Production

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
62

Total Student Contact Hours:
62

Course Fee
50

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
Other

Goals, Topics, and Objectives

Course Goals
The goal of this course is to equip students with advanced video production skills, emphasizing specialized techniques such as drone, gimbal, and glide camera operation, sophisticated lighting setups, and special effects. Students will create projects across various formats, while developing post-production plans and exploring distribution strategies. Through collaborative projects and ethical analysis, students will be prepared to meet industry standards and produce professional media content for news, entertainment, and education, with a focus on continuity, production values, and responsible storytelling.

Core Course Topics
1. Instructional, Educational and Informational Videos: Purpose and Standard Production Guidelines for Specialized Video Formats
2. Advanced Special Effects Techniques
3. Advanced Camera Techniques Using Equipment Such as Drones, Gimbals and Glides
4. Enhanced Lighting Choices and Techniques
5. Advanced Editing Techniques
6. Post Production Planning
7. Distribution Choices
8. Group Work: The Team Approach to Video Production
9. Industry Standards and Analysis for Ethical and Professional Considerations
10. Dramatic Scenes Focusing on Continuity and Advanced Production Values
11. Documentaries Using Appropriate Production Guidelines

- Plan and produce short instructional/educational/informational videos, including dramatic scenes, documentaries and special effect sequences
- Advanced camera techniques using equipment such as drones, gimbals, and glides
- Execute advanced lighting skills
- Execute advanced editing and special effects skills
- Generate post-production plan of work to achieve desired end results
- Compare and contrast distribution options for video
- Debate choices for content/editing as a group to support a final product as it relates to responsible media production
- Evaluate industry standards while assessing ethical implications of media production choices/techniques

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
- Tests on the pertinent theoretical and critical knowledge
- Review of portfolio of video work produced

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for MCA 258

MCA261 - Broadcast Journalism

Overview

Subject
Media Communication Arts

Academic Department
Media Communication Arts

School
Liberal Arts

Course Description
This course offers an immersive experience in broadcast journalism, covering news writing, production, and ethical considerations for radio, television, and digital media. Students will work on the news team of WHFR-FM 89.3, Henry Ford College's student-run station, contributing high-quality broadcast stories through written copy, audio actualities, and prerecorded interviews. In addition, students will produce TV news packages and stories in the studio, gaining hands-on experience with industry-standard equipment and techniques while upholding professional ethical standards in journalism.

Course Pre-requisite(s)
Eligible to take ENG131 Introduction College Writing at HFC. Some basic knowledge of computer operation is highly recommended.

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
15

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
Skilled Demonstration Details

Skilled demonstration, given in department by department faculty. Faculty will assess demonstration based on evaluation rubric. Evaluation rubric and student checklist located in The School of Liberal Arts office.

Portfolio Review Details

Portfolio must contain evidence that illustrates competency in all course learning objectives not already measured through the skilled demonstration. Department faculty will evaluate submitted portfolios based on the evaluation rubric. Evaluation rubric and student checklist located in The School of Liberal Arts office.

Goals, Topics, and Objectives

Course Goals
The goal of this course is to prepare students for professional broadcast journalism by developing skills in news writing, research, and production across radio, television, and online platforms. Through hands-on projects at WHFR-FM, students will gain experience in creating broadcast news stories, from writing and editing copy to producing actualities, sound bites, and Interviews. Emphasis is placed on understanding media laws, ethical standards, and the evolving role of social media in news. Students will also analyze what constitutes 'news' in today's media landscape, preparing them to make informed, responsible contributions to the field of broadcast journalism.
Core Course Topics

1. What is "News"?
2. Print and Online Sources and Areas of Research for Broadcast News
3. Mechanics of Radio, Television, and Online News Writing
4. Radio News Story Guidelines and Show Production for WHFR Radio
5. Newsroom Tasks and the Role of the News Director
6. Media Laws and Ethics for Broadcast News Writing
7. Actualities and Sound Bites: Recording, Editing and Proper Layout
8. Interviewing
9. Television and Online News Packages
10. News Across Social Media

Analyze and debate the topic of what constitutes "news" in a media literate society

Develop and integrate the research and rewrite of print and other sources required for broadcast news stories

Interpret and evaluate the standard mechanical form and style of broadcast news stories

Write, revise, and produce by deadline standard broadcast news stories to fit the mission of WHFR's format, covering local and HFC news events, as applicable

Explain the job of News Director and demonstrate the role for at least one class news broadcast

Evaluate a minimum of 5 class news broadcasts for legal and ethical consequences and industry standards

Record and edit actualities and sound bites, incorporated into news stories, submitted by deadline, over the class broadcast period

Conduct, record, and edit if necessary one 3-5 minute radio interview for potential airing on WHFR

Create a television news package script to reflect minimum industry standards

Discuss and debate how social media is affecting the knowledge base of our news interpretation as a society

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement

- Tests/quizzes on the pertinent theoretical and critical knowledge
- Critique and grading of "newsworthiness and air-ability" of weekly story choices and mechanics
- Review of portfolio of final draft of all scripts produced, including sound bites and TV package if applicable

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for MCA 261

MCA281 - Media Communication Arts Capstone

Overview

Subject
Media Communication Arts

Academic Department
Media Communication Arts

School
Liberal Arts

Course Description
This course provides an opportunity for students in their last semester of the Media Communication Arts Associate of Arts program to demonstrate and apply the knowledge and skills they've gained throughout their studies. Taken during the final term of required MCA coursework, it prepares students for graduation and future academic or professional opportunities by emphasizing practical application and reflection, and showcasing the achievements of their educational journey.

Course Pre-requisite(s)
This course should be taken during the student's last term of required MCA classes. Instructor Permission Only. Eligible to take ENG131 Introduction College Writing at HFC.

Course Co-requisite(s)
This course should be taken during the student's last term of required MCA classes. Instructor Permission Only.

Credit Hours
1

Total Contact Hours
Total Instructor Contact Hours:
16

Total Student Contact Hours:
16

Course Fee
10

Academic Level
Undergraduate

Goals, Topics, and Objectives

Course Goals
The goal of this course is to provide students with the opportunity to demonstrate and apply the knowledge and skills they have gained throughout the Media Communication Arts Associate of Arts program. By emphasizing practical application, thoughtful reflection, and showcasing their achievements, the course prepares students for graduation and future academic or professional opportunities.
Core Course Topics

1. Assessment of Media Communication Arts basics, Film History and Criticism, Media Writing, Media Performance, Audio Production, Video Production, and Broadcast Journalism
2. Collection of portfolio of technical work
3. Assessment of writing samples
4. Prioritizing of significance of Media theories and approaches in the 21st century

Prove knowledge of core MCA subject matter through successful assessment and technical acumen

Finalize a portfolio review of work in MCA 131, 132, 241, 243, 251, 257, and 261

Develop a subjective priority list and essay of theoretical knowledge learned

Produce and defend an essay of critical analysis on a specific topic agreed upon by student and instructor

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement

- Review of portfolio for quality and specific industry standards
- Evaluate critical essay/presentation's expression and depth of insight

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for MCA 281

MCA294 - Media Communication Arts Internship

Overview

Subject
Media Communication Arts

Academic Department
Media Communication Arts

School
Liberal Arts

Course Description
This course provides hands-on experience supporting media-related work in a variety of setting options, such as a radio or TV station, local community access facility, social media agency, advertising firm, public relations office, non-profit, or other organization that integrates media as part of their operations or outreach efforts. Students will complete 125-150 hours of work, either volunteer or paid, as determined by the host organization. Internship opportunities vary each semester, and students must collaborate with the instructor to secure placement at least ONE MONTH before the semester begins. This experience offers valuable industry insights, skill development, and professional networking in the dynamic field of media communication.

Course Pre-requisite(s)
This internship should be taken towards end of student's MCA degree completion. Pre-approval from Instructor is required before enrolling. Eligible to take ENG131 Introduction College Writing at HFC.

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Academic Level
Undergraduate

Goals, Topics, and Objectives

Course Goals
The goal of this course is to provide students with on-the-job media experience in a professional setting, enabling them to explore the daily operations, workflows, and practices of an organization while contributing meaningfully to media-related tasks that support its objectives.

Core Course Topics
1. The workings of a real-world media facility to showcase basic knowledge learned and gain advanced experience in that specific field.
2. Project log and related samples/recordings for completed skills used in resume or portfolio support.
3. Successful integration into a working media environment.
4. Industry and specific facility evaluation as it relates to coursework, future career trends, and networking opportunities.
5. The impact of specific media outlet, its role in society and ethical standards.

Evaluate and apply completed coursework learned in a real-world media environment.

Illustrate and defend when asked about project log and maintenance system for personal resume or portfolio.

Successfully integrate in student's chosen field with working professionals and contribute to the success of the specific facility in an ongoing way.

Synthesize behind-the-scenes knowledge of the inside workings of a specific media outlet and ongoing examples of what it takes to be successful.

Create a first impression as a contributor to the specific media outlet for possible future employment or resume reference.

Generate valuable networking contacts through association as a contributor to the specific media outlet for possible future employment or resume reference.

Outline and define the overall impact of the media outlet, its critical role in society locally, globally and ethically, and how the student's input made a difference through an agreed-upon written log, project, or critical essay at the semester's end.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
- Evaluation log to be completed and graded at semester's end of student's contribution to specific media outlet
- Final evaluation by media supervisor of facility student was placed in
- Final graded student presentation, written and/or verbal, expressing evaluation of student's analysis of media entity and its impact on our local society

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for MCA 294

MCA295 - Media Communication Arts Directed Study

Overview

Subject
Media Communication Arts

Academic Department
Media Communication Arts

School
Liberal Arts

Course Description
This course offers students the opportunity to design and execute a self-directed project within the Media Communication Arts field under the mentorship of a faculty advisor. Students will conceptualize, plan, and develop a project that may be scholarly, creative, technical, or a combination of these approaches. Projects should reflect the student's academic and/or professional interests and must receive prior approval from the instructor. Regular progress reviews and critical reflection will support the creation of a high-quality final outcome.

Course Pre-requisite(s)
Instructor Permission Only, Eligible to take ENG131 Introduction College Writing at HFC.

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
10

Academic Level
Undergraduate

Goals, Topics, and Objectives

Course Goals
The goal of this course is to provide an opportunity for students to explore and engage deeply with a topic in the Media Communication Arts field through scholarly, creative, technical, or blended approaches, working closely with a faculty mentor to develop a comprehensive project that demonstrates enhanced understanding, critical insight, and appreciation for the subject matter.

Core Course Topics
1. Discussion and submission of a specific project proposal which, after acceptance by instructor, becomes the class project.
2. The use of critical thinking to relate aspects of this project to support and enhance the importance of a media-literate society.
3. Project work and completion, with guidance from the instructor at critical stages.
4. Creation of a measurement plan which, after acceptance by instructor, becomes the class contract.

Propose a project based on some aspect of Media Communication Arts with instructor approval

Organize a measurement plan to allow for assessment with instructor approval

Successfully structure and produce a significant project in a Media Communication Arts area, either scholarly, creative, technical, or a combination of approaches

Present and defend overall decision for the importance of topic choice and final project as it relates to supporting a media literate society

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Instructor will assess the quantity and quality of the work based on the parameters of the project itself, whether written, produced, or presented/performed.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for MCA 295

MFMT151 - Power Engin Stationary Steam Core Skills

Overview

Subject
Energy Technology

Academic Department
Building Sciences

School
Business, Entrepreneurshp, PD

Course Description
Prepares a student to function effectively as an entry-level Stationary Steam Engineer or in the capacity as introductory power plant personnel. Provides basic skills, knowledge, and familiarization with power, process, and heating-cooling plants through the study of basic principles and how they apply to the various types of equipment and systems found in such plants. Emphasizes the need for a hands-on approach where possible in a workplace laboratory setting and this is provided in the cogeneration lab with appropriate activities. Covers general workplace and personal safety along with hazardous or environmental concerns. Mandatory field trips and plant visits.

Credit Hours
5

Total Contact Hours
Total Instructor Contact Hours:
77

Total Student Contact Hours:
77

Course Fee
50

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
This course is identified as a departmental course for which a learner can receive college credit for prior college-level learning and/or skills acquired outside the traditional classroom. Terms of the HFCC Credit for Prior College-Level Learning Policy may be met by review of the appropriate documentation, skill, certifications, and/or knowledge acquired by the learner and submitted for evaluation by the appropriate departmental faculty. As required, one or more of the following may be considered in the evaluation process:

1. field experience,

2. licenses held,

3. completing course exams and/or.

4. completion of laboratory performance sequences or steady-state lab sessions and/or,

5. completing a portfolio,

6. completion of an equivalent course or series of courses at other institutions.

Goals, Topics, and Objectives

Core Course Topics

1. Heat/Power Plant Orientation
2. Heat/Power Plant Systems - Familiarization
3. Types of Steam BoiStationary Steam Engineering - Steam-Heat Basics
4. Codes & Safety
5. Boiler Operation
6. Boiler Auxiliaries & Accessories
7. Fuels - Combustion
8. Mechanical Equipment & Systems
9. Air Compression Systems
10. Heat Rejection - Cooling Towers
11. Water Treatment
12. Heating, Air Conditioning
13. Instruments & Control Systems
14. Plant Electrical Distribution
15. Industrial Technologies Energy Management DOE-EERE Energy Qualification
16. Building Technologies DOE-EERE Commercial, Industrial Energy Management Qualification
17. Power/Process/Heating Plant Best Practices and Base Line Case Studies Basics

Demonstrate knowledge of and understanding of skills required to operate/maintain power and facilities plant and electrical generation, electrical distribution equipment and systems.*

Distinguish between the requirements for heat/power plant orientation related to field conditions and education and training processes.

Identify/describe the function of components and systems in typical steam power/process plants.

Identify/describe the function of components and systems in typical steam/electric generating and cogeneration plants.

Heat/Power Plant Systems - Familiarization

Distinguish between the requirements of heat/power plant systems and their familiarization related to field conditions and education and training processes.

*Identify/describe function of components in typical steam, water, fuel, gases and other distribution systems found in operating power and process plants.

Stationary Steam Engineering - Codes and Safety

Distinguish between the requirements for codes and safety related to field conditions and education and training processes.

Identify/describe the principles and function of the basic boiler/plant steam cycle, water cycle, and fuel/combustion systems and cycles.

Codes & Safety

Distinguish between the requirements for codes & safety related to field conditions and education and training processes.

Identify safe practices, describes code references for application to power plants and power and heating boilers.

Communication & Technical Data

Distinguish between the requirements for communication & technical data related to field conditions and education and training processes.

Interpret and apply technical information/data from manufacturers on equipment and systems.

Boiler Operation

Distinguish between the requirements for boiler operation related to field conditions and education and training processes.

Classify various types of boilers and identify boiler components/cycles.

Boiler Auxiliaries & Accessories

Distinguish between the requirements for boiler auxiliaries & accessories related to field conditions and education and training processes.

Demonstrate familiarity with-uses startup, shutdown, normal operating and emergency operation instructions for pumps, turbines, auxiliaries, accessories and other plant rotating or stationary equipment from knowledge of actual equipment or manufacturers technical instructions.

Fuels - Combustion

Distinguish between the requirements for fuels and combustion related to field conditions and education and training processes.

Identify characteristics of fuels, basic combustion and combustion efficiency and demonstrate a constructive knowledge of safe practices for adjusting or operating combustion systems.

Mechanical Equipment and Systems

Distinguish between the requirements for mechanical equipment and systems related to field conditions and education and training processes.

Identify/explain the basic elements and characteristics of the maintenance process, tools, materials, instruments and equipment necessary for constructive mechanical equipment and systems maintenance.

Air Compression Systems

Distinguish between the requirements for air compression systems related to field conditions and education and training processes.

Identify/explain characteristics of air compression, various types compressors, their operation and maintenance.

Heat Rejection - Cooling Towers

Distinguish between the requirements for heat rejection - cooling towers related to field conditions and education and training processes.

Identify/explain characteristics of various types of cooling towers, water treatment for cooling towers their components and their systems.

Water Treatment

Distinguish between the requirements for water treatment related to field conditions and education and training processes.

Identify/explain characteristics of power plant basic water treatment and treatment systems.

Heating, Air Conditioning

Distinguish between the requirements for heating, air conditioning related to field conditions and education and training processes.

Identify/explain characteristics of various types of steam and hot water heating, cooling/chiller air handling, rooftop and other HVACR systems and the typical operating and maintenance procedures for each.

Instruments & Control Systems

Distinguish between the requirements for instruments & control systems related to field conditions and education and training processes.

Identify/explain characteristics and principles of various types automatic control systems and their components including pneumatic and electric/ electronic and digital systems.

Plant Electrical Distribution

Distinguish between the requirements plant electrical distribution related to field conditions and education and training processes.

Identify typical power/building electrical distribution systems and their associated components.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
The assessment for this course will include lab experiences for each objective and exams covering each major topic with the percentage of student achievement for these elements and the percentage of the total course being determined by the individual instructor.

Texts
Prescribed by the subject matter expert FT instructor responsible for curricular development and implementation of this course.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for MFMT 151

MFMT224 - Automated Control Systems I

Overview

Subject
Energy Technology

Academic Department
Building Sciences

School
Business, Entrepreneurshp, PD

Course Description
Provides practical application of repair and maintenance skills to automated control systems. Includes various commercial-industrial plant heating, power, process, building and facilities equipment and systems. Covers the fundamentals of instrumentation calibration, solid-state components, microprocessors, logic circuits, and programmable logic controllers (PLC) areas. Learners must be prepared to access simulation, computer interface, and similar materials online for completion of this course. Plant visits may be required.

Course Pre-requisite(s)
Instructor Permission

Credit Hours
2

Total Contact Hours

Total Instructor Contact Hours:
32

Total Student Contact Hours:
32

Course Fee
30

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
This course is identified as a departmental course for which a learner can receive college credit for prior college-level learning and/or skills acquired outside the traditional classroom. Terms of the HFC Credit for Prior College-Level Learning Policy may be met by review of the appropriate documentation, skill, certifications, and/or knowledge acquired by the learner and submitted for evaluation by the appropriate departmental faculty. As required, one or more of the following may be considered in the evaluation process: A. field experience B. licenses held C. completing course exams and/or D. performance sequences and/or E. competing a portfolio. F. assessment of private trade school or other extensive college level industry training and learning by a departmental faculty member

Goals, Topics, and Objectives

Core Course Topics

1. Safety.
2. Solid State Devices.
3. Power Supplies.
4. Test Equipment.
5. Circuit Board Soldering.
6. Integrated Circuits.
7. Digital versus Analog Systems.
8. Numbering Systems.
9. Logic Circuits.
10. Logic Analysis and Simplification.
11. Programmable Logic Devices (PLC).
12. Microprocessor Operations.
13. Troubleshooting and Testing Digital Circuits.
14. Principles of Control and Measurement.
15. Calibration.
16. Application of Instrumentation.
17. Application of Loop Tuning.
18. Programming Microprocessor-based Controllers.
19. PLC Applications.

Identify various instrumentation equipment and systems and their function which require attention during the course of normal operation.

Describe the required service, maintenance and operational activities for various instrumentation equipment and systems necessary to ensure sustainability of operation on a daily basis.*

Analyze operation of various instrumentation equipment and systems using the proper procedures and using the resulting data to ensure sustainability of efficiency of these elements.*

Document acceptable practices or bench marks for operation and maintenance of equipment and systems in a practical field environment in each of the basic areas indicated below:*

Safety

Solid State Devices

Power Supplies

Test Equipment

Circuit Board Soldering

Integrated Circuits

Digital versus Analog Systems

Numbering Systems

Logic Circuits

Logic Analysis and Simplification

Programmable Logic Devices (PLC)

Microprocessor Operation.

Apply skill and knowledge to accomplish productive operation and maintenance activities in field situations and scenarios in the following various instrumentation areas:*

Troubleshooting and Testing Digital Circuits

Control and Measurement

Calibration

Set-up of Instrumentation

Loop Tuning

Programming Microprocessor-based Controllers

PLC Operations and Maintenance.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Students will demonstrate their competence in the subject matter and objective areas by one or more of the following based upon the indication of industry standards and requirements: Written exam or multiple quizzes on specific subjects Online quizzes, exams, or exercises Performance-based exercises, labs, or industry practical training Scenario or context-based exerciStudents will demonstrate their competence in the subject matter and objective areas by one or more of the following based upon the indication of industry standards and requirements:

1. Written exam or multiple quizzes on specific subjects
2. Online quizzes, exams, or exercises
3. Performance-based exercises, labs, or industry practical training
4. Scenario or context-based exercises, activities from field situations
5. Written paper, report, project, or collaborative exercise
6. Presentations, learning object development, or creative research
7. Proctored, supervised, or real workplace experience
8. Independent study, internship, externship, or co-op education experience
9. Performance-type experiences-exercises approved by instructor

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for MFMT 224

MFMT241 - Power Engin Refrigeration License Review

Overview

Subject
Energy Technology

Academic Department
Building Sciences

School
Business, Entrepreneurshp, PD

Course Description
Advanced-level course providing refrigeration system operators, refrigeration journeymen, refrigeration service, and maintenance technicians with a comprehensive review in preparation to take a 1st, 2nd, or 3rd Class Refrigeration Operator License exam, the Refrigeration Journeyman License exam, similar related exams or to prepare for commercial or industrial refrigeration operation and maintenance positions. Covers the fundamentals of refrigeration, identification, and functions of various refrigeration systems and equipment with special commercial and industrial refrigeration systems covered on the license exams. Access to computers is critical for the mandatory computer-aided field research which requires visits to current refrigeration industry web sites. Students must be computer literate with web browsers, word processing, spreadsheets, e-mail, and other computer-online activities. Laboratory activities. May require field trips. NOTE: License exams are not included in this course.

Course Pre-requisite(s)
Advanced refrigeration field experience or Instructor Permission

Credit Hours
5

Total Contact Hours
Total Instructor Contact Hours:
77

Total Student Contact Hours:
77

Course Fee
50

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
This course is identified as a departmental course for which a learner can receive college credit for prior college-level learning and/or skills acquired outside the traditional classroom. Terms of the HFCC Credit for Prior College-Level Learning Policy may be met by review of the appropriate documentation, skill, certifications, and/or knowledge acquired by the learner and submitted for evaluation by the appropriate departmental faculty. As required, one or more of the following may be considered in the evaluation process: A. field experience B. licenses held C. completing course exams and/or D. performance sequences and/or E. competing a portfolio. F. assessment of private trade school or other extensive college level industry training and learning by a departmental faculty member

Goals, Topics, and Objectives

Core Course Topics

1. Refrigeration Terms/Definitions and Refrigeration Operator Codes
2. Refrigerants: Physical and Refrigerating Properties, Liquid Feed Devices or Expansion Valves
3. Evaporators and Compressor Basics I
4. Condensers and Flow Equipment
5. Electrical Controls and Control Valves, and Instruments & Meters
6. Lubrication and Compressor Drives
7. Food Preservation
8. Defrosting and Humidity in Refrigeration
9. Heat Calculations and Defrosting
10. Compressor Calculations II
11. Refrigerant Lines and Pressure Drops
12. Brine in Refrigeration and Liquid Cooling
13. Complete Refrigeration Systems, Carbon Dioxide-Dry Ice, and Ice Making
14. Absorption Systems, Centrifugal Chiller Systems, and Air Conditioning Systems
15. Operation and Maintenance of Refrigerating Systems and Enclosures
16. Commercial and Industrial Refrigeration Certification and Licensing
17. Industrial Energy Management - Quick Energy Profiler (PEP) (DOE-EERE)
18. Refrigeration and Boiler Plant Best Practices (includes Base Line Case Studies)

Refrigeration Terms/Definitions and Refrigeration Operator Codes

Demonstrate technical and practical field conditions mastery of advanced refrigeration terms/definitions and in the refrigeration operator code subject areas.*

Refrigerants: Physical and Refrigerating Properties, Liquid Feed Devices or Expansion Valves

Demonstrate technical and practical field conditions mastery in the major refrigerants and in the metering device subject areas.*

Evaporators and Compressor Basics I

Demonstrate technical and practical field conditions mastery in the advanced refrigerant evaporator and compressor subject areas.*

Condensers and Flow Equipmen

Demonstrate technical and practical field conditions mastery in the refrigerant condenser and flow accessories subject areas.

Electrical Controls and Control Valves, and Instruments & Meters

Demonstrate technical and practical field conditions mastery in the refrigerant controls and refrigeration field instruments and test equipment subject areas.

Lubrication and Compressor Drives

Demonstrate technical and practical field conditions mastery in the refrigeration lubrication and compressor drive subject areas.

Food Preservation

Demonstrate technical and practical field conditions mastery in the refrigeration food preservation area.

Defrosting and Humidity in Refrigeration

Demonstrate technical and practical field conditions mastery in the refrigeration defrost and humidity control subject areas.

Heat Calculations and Defrosting

Demonstrate technical and practical field conditions mastery in the refrigeration planning, installation and heat calculations subject areas.

Compressor Calculations II

Demonstrate technical and practical field conditions mastery in the advanced refrigeration compressor calculation and installation subject areas.

Refrigerant Lines and Pressure Drops

Demonstrate technical and practical field conditions mastery in the refrigeration line installation, piping and pressure drop problem handling subject areas.

Brine in Refrigeration and Liquid Cooling

Demonstrate technical and practical field conditions mastery in the refrigeration brine and liquid cooling subject areas.

Complete Refrigeration Systems, Carbon Dioxide-Dry Ice, and Ice Making

Demonstrate technical and practical field conditions mastery in the refrigeration dry ice and ice-making subject areas.

Absorption Systems, Centrifugal Chiller Systems, and Air Conditioning Systems

Demonstrate technical and practical field conditions mastery in the refrigeration centrifugal and absorption chiller system subject areas.

Operation and Maintenance of Refrigerating Systems and Enclosures

Demonstrate technical and practical field conditions mastery in the refrigeration operation and maintenance subject areas.

Commercial and Industrial Refrigeration Certification and Licensing

Demonstrate technical and practical field conditions mastery of the materials required for exams in the refrigeration certification and licensing subject areas.

Industrial Energy Management - Quick Energy Profiler (PEP) (DOE-EERE)

Demonstrate technical and practical field conditions mastery in the industrial refrigeration management subject areas.

Refrigeration and Boiler Plant Best Practices (includes Base Line Case Studies)

Demonstrate technical and practical field conditions mastery in the refrigeration best practices and base line case studies areas.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
The assessment for this course will include lab experiences for each objective and exams covering each major topic with the percentage of student achievement for these elements and the percentage of the total course being determined by the individual instructor.

General Course Requirements and Recommendations
Student must have access to a computer to complete the requirements for the course. This may be at home or when without a home computer the student must access computer lab computers on campus on a regular basis throughout the course. Student must be computer literate with web browsers, word processing, spread sheets, e-mail, and other computer-online activities.

Texts
Prescribed by the subject matter expert FT instructor responsible for curricular development and implementation of this course.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for MFMT 241

MFMT248 - Power Engineering - Steam License Review

Overview

Subject
Energy Technology

Academic Department
Building Sciences

School
Business, Entrepreneurshp, PD

Course Description
An advanced-level course for engineers seeking 1st or 2nd Class Steam License. Course reviews various power engineering subjects including boilers, basic thermodynamics, boiler operation, maintenance, plant efficiency, pumps, auxiliaries, power plant accessories, turbines, engines, electrical, compressors, internal combustion engines, and national, state and local steam and boiler codes. Explores how to solve typical power plant problems. Also offers information on how to study, sketch, analyze, and describe the function of systems and components on commercial-industrial power and process plant equipment and systems. NOTE: License exams are not included in this course.

Course Pre-requisite(s)
Instructor Permission

Credit Hours
5

Total Contact Hours
Total Instructor Contact Hours:
77

Total Student Contact Hours:
77

Course Fee
50

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
This course is identified as a departmental course for which a learner can receive college credit for prior college-level learning and/or skills acquired outside the traditional classroom. Terms of the HFCC Credit for Prior College-Level Learning Policy may be met by review of the appropriate documentation, skill, certifications, and/or knowledge acquired by the learner and submitted for evaluation by the appropriate departmental faculty. As required, one or more of the following may be considered in the evaluation process: 1. field experience. 2. licenses held. 3. completing course exams and/or. 4. performance sequences and/or. 5. competing a portfolio. 6. assessment of private trade school or other extensive college level industry training and learning by a departmental faculty member.

Goals, Topics, and Objectives

Core Course Topics

1. Codes and Code Orientation, Governmental License-Registration Agencies, NFPA, Appropriate Ordinances
2. Basic Thermodynamics, Practical Power Engineering Science, Heat Engines, Basic Combustion, Gas Laws, Steam Tables, Steam Calorimetry
3. Boilers, Types, Construction, and Calculations
4. Boilers, Problems, Sketches, Questions, Operation and Maintenance, and Boiler Controls
5. Pumps and Auxiliaries, Pump Theory and Calculations, Piping, Boiler Feedwater Pumps and Controls, Injectors
6. Treatment, Testing, Boiler Blowdown Systems, and Water Treatment Systems
7. Combustion, Boiler Efficiency, and Emission Controls
8. Fuels - Firing, Gas, Oil, and Coal Systems
9. Steam Engines, Heat Engines, and Basic Plant Cycles
10. Steam Turbine Types, Construction, and Calculations
11. Steam Turbine Lubrication, Governing, Operation and Maintenance, Condensers, and Generator Controls
12. Internal Combustion Engines and Compressors
13. Power Plant Basic Electrical Theory and Calculations, AC, DC, Machines And Generators, Transformers, Rectifiers, Converters
14. Power Plant Electrical Systems, Generation, Distribution Circuit Protection, Operation and Maintenance
15. Industrial Energy Management and Quick Energy Profiler (PEP) Qualification (DOE-EERE)
16. Boiler Plant Best Practices and Base Line Case Studies Basics
17. Practical/Lab Exercises and Practice Exams and Exercises and Activities for Typical License Exams

Codes and Code Orientation, Governmental License-Registration Agencies, NFPA, Appropriate Ordinances	
	Demonstrate technical and practical field conditions mastery in the codes and licensing subject areas.*
Basic Thermodynamics, Practical Power Engineering Science, Heat Engines, Basic Combustion, Gas Laws, Steam Tables, Steam Calorimetry	
	Demonstrate technical and practical field conditions mastery in the practical steam and heat application areas.
Boilers, Types, Construction, and Calculations	
	Demonstrate technical and practical field conditions mastery in the boiler construction and calculation areas to meet or exceed the needs and expectations of license agency examiners, employers or evaluators/ instructors and to meet license agency exam requirements and/or pass these exams or college administered industry example exams.*
Boilers, Problems, Sketches, Questions, Operation and Maintenance, and Boiler Controls	
	Demonstrate technical and practical field conditions mastery in the boiler problem, operation, maintenance and controls subject areas.
Pumps and Auxiliaries, Pump Theory and Calculations, Piping, Boiler Feedwater Pumps and Controls, Injectors	
	Demonstrate technical and practical field conditions mastery in the boiler pumps and auxiliaries subject areas.
Treatment, Testing, Boiler Blowdown Systems, and Water Treatment Systems	
	Demonstrate technical and practical field conditions mastery in the boiler water treatment subject areas.
Combustion, Boiler Efficiency, and Emission Controls	
	Demonstrate technical and practical field conditions mastery in the boiler combustion, efficiency and emission controls subject areas.
Fuels - Firing, Gas, Oil, and Coal Systems	
	Demonstrate technical and practical field conditions mastery in the boiler fuels, firing systems subject areas.
Steam Engines, Heat Engines, and Basic Plant Cycles	
	Demonstrate technical and practical field conditions mastery in the steam engine, heat engine, basic plant cycles subject areas.
Steam Turbine Types, Construction, and Calculations	
	Demonstrate technical and practical field conditions mastery in the steam turbine construction and calculations subject areas.
Steam Turbine Lubrication, Governing, Operation and Maintenance, Condensers, and Generator Controls	
	Demonstrate technical and practical field conditions mastery in the steam turbine lubrication, governing and operation and maintenance subject areas.
Internal Combustion Engines and Compressors	
	Demonstrate technical and practical field conditions mastery in theinternal combustion engine and compressors subject areas.
Power Plant Basic Electrical Theory and Calculations, AC, DC, Machines And Generators, Transformers, Rectifiers, Converters	
	Demonstrate technical and practical field conditions mastery in the power plant electrical equipment, machines and system subject areas.
Power Plant Electrical Systems, Generation, Distribution Circuit Protection, Operation and Maintenance	
	Demonstrate technical and practical field conditions mastery in the power plant electrical generation, distribution and protection system subject areas.
Industrial Energy Management and Quick Energy Profiler (PEP) Qualification (DOE-EERE)	
	Demonstrate technical and practical field conditions mastery in the industrial energy management subject areas.*
Boiler Plant Best Practices and Base Line Case Studies Basics	
	Demonstrate technical and practical field conditions mastery in the boiler plant best practices and base line studies subject areas*
Practical/Lab Exercises and Practice Exams and Exercises and Activities for Typical License Exams	
	Demonstrate technical and practical field conditions mastery upon taking practice lab example and field type licensing exams.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
The assessment for this course will include lab experiences for each objective and exams covering each major topic with the percentage of student achievement for these elements and the percentage of the total course being determined by the individual instructor

Texts
Prescribed by the subject matter expert FT instructor responsible for curricular development and implementation of this course.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for MFMT 248

MGT230 - Principles of Management

Overview

Subject
Management

Academic Department
Business & Economics

School
Business, Entrepreneurshp, PD

Course Description
Examines the functions, principles, history, environments, and philosophy of modern management as well as the nature and structure of organizations. Emphasizes recent developments in organizational decision making, styles of managerial leadership, and the role of effective communication in management. Also explores motivating, managing, recruiting, and terminating employees.

Course Pre-requisite(s)
Eligible to take ENG courses at HFC

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
Other

Goals, Topics, and Objectives

Core Course Topics

1. Introduction to Management
2. Management History and Theoretical Approaches
3. The Managerial Environment
4. International Management
5. Planning
6. Decision Making
7. Organizational Culture and Design
8. Human Resource Management
9. Organizational Change and Innovation
10. Human Capital
11. Motivation
12. Role of Groups and Teams in Organizations
13. Leadership
14. Communication Managerial Control

Analyze the relationship among the four functions of management and their effects on organizational success.

Compare and contrast the levels of managerial skills, types of managers, and managerial roles.

Describe effective and efficient management.

Compare and contrast entrepreneurship and intrapreneurship.

Discuss the history of managerial thought.

Evaluate management theories.

Appraise the concept of learning organizations.

a. Compare and contrast internal and external stakeholders.

Analyze the Task Environment and General Environment.

Evaluate the role of ethics and social responsibility in managerial decision making.

Evaluate the impact of diversity on managerial behavior.

Describe the impact of globalization on management.

Assess why and how companies expand internationally and the challenges they face.

Describe the role culture plays in managerial decision making.

Distinguish the different levels of planning.

Analyze the planning process and goal setting.

Explain the formulation of competitive strategy, strategic management, strategic planning, and their processes.

Identify and analyze organization strengths, weaknesses, opportunities and threats (i.e., "SWOT" analysis).

Compare and contrast rational and non-rational decision making.

Appraise the advantages and disadvantages of utilizing individual and group decision making.

Discuss the types of organizations and the building blocks of organizational structure.

Analyze the role of organizational culture.

Identify and discuss the activities of human resource management.

Evaluate major laws and proper procedures associated with human resource management.

Compare and contrast inside and outside forces impacting organizational development.

Discuss the effect of change and the challenges of overcoming the resistance to change.

Identify and list different personality characteristics and their effects on the organization.

Recognize the sources and consequences of job-related stress and how to reduce its impact.

Compare and contrast motivational theories.

Compare and contrast groups and teams.

Analyze the stages of team development.

Describe the process of developing and managing effective teams.

Differentiate the various approaches to effective leadership.

Compare and contrast the sources and benefits of power and the uses of persuasion.

Examine the communication process and the methodologies for effective communication in an organization.

Analyze techniques for enhancing organizational effectiveness.

Discuss the levels and areas of control and barriers to effective measurement.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Students will be assessed through tests, quizzes, assignments, presentations, class participation, group activities, case studies, and/or projects.

Grading Scale

LETTER GRADE	PERCENTAGE
A	93-100%
A-	90% - 92.9%
B+	87% - 89.9%
B	83% - 86.9%
B-	80% - 82.9%
C+	77% - 79.9%
C	73% - 76.9%
C-	70% - 72.9%
D+	67% - 69.9%
D	63% - 66.9%
D-	60% - 62.9%
E	<60% E

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for MGT 230

MGT231 - Leadership and Teambuilding

Overview

Subject
Management

Academic Department
Business & Economics

School
Business, Entrepreneurshp, PD

Course Description
Explores how to develop and improve supervisory skills. Covers effective leadership techniques, how to identify and evaluate various leadership styles, and development of teambuilding skills.

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Communication and Listening Skills
2. Critical Thinking and Problem Solving
3. Building an Effective High-Performance Team
4. Management vs. Leadership
5. Keys to Successful Supervision
6. Successful Workplace Relationships
7. The Role of Human Resources
8. Decision Making
9. Strategic Planning and Goal Setting
10. Change in the Modern Organization
11. Creativity and Innovation
12. Organizational Structure and Design
13. Working in a Virtual World: Technology as a Way of Life
14. Organizational Controls
15. Sustainability and Corporate Social Responsibility

Evaluate methods of communication, and identify effective and efficient communication channels.

Analyze effective verbal and nonverbal communication skills.

Discuss effective listening skills.

Critique approaches to recognize and communicate sensitive work-related issues.

Define and assess the critical thinking process.

Examine methodologies for determining and solving business and human resource problems and opportunities.

Describe the stages of team building.

Analyze supervisory motivational techniques.

Identify and minimize potential barriers to effective team building.

Describe the effect of diversity on team dynamics.

Describe the differences between being a manager and a leader.

Identify the traits and skills required to transition from a manager to a leader.

Compare and contrast leadership styles and appropriate applications.

Differentiate the different forms of leadership.

Describe the different types of ethical dilemmas.

Assess how to handle business decisions ethically.

Assess the behaviors required to build successful relationships.

Compare and contrast motivation theories to create a productive work environment.

Formulate strategies to understand, support, and utilize diversity.

Discuss the effect globalization has had on leadership.

Describe what Human Resources can do to foster change.

Discuss how Human Resources can support critical decision making.

Analyze the legal requirements associated with hiring activities.

Compare and contrast types of decisions.

Explain the systematic approach to decision making.

Define the elements and steps in the strategic planning process.

Discuss the role and results of change.

Analyze the diversity imperative in change.

Describe why creativity and innovation are important in business.

Compare and contrast intrapreneurship and entrepreneurship.

Analyze different organizational designs.

Compare and contrast different forms of business ownership.

Describe how technology affected work during. the industrial revolutions.

Analyze the challenges of working in a virtual world.

Describe the control process.

Analyze how organizational control effect ethical behavior.

Compare and contrast the different forms of sustainability.

Describe corporate social responsibility.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Students will be assessed through tests, quizzes, assignments, case studies, presentations, class participation, group activities, and/or role playing.

Grading Scale

LETTER GRADE	PERCENTAGE
A	93-100%
A-	90% - 92.9%
B+	87% - 89.9%
B	83% - 86.9%
B-	80% - 82.9%
C+	77% - 79.9%
C	73% - 76.9%
C-	70% - 72.9%
D+	67% - 69.9%
D	63% - 66.9%
D-	60% - 62.9%
E	<60% E

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for MGT 231

MGT237 - Organizational Behavior

Overview

Subject
Management

Academic Department
Business & Economics

School
Business, Entrepreneurshp, PD

Course Description
Introduces psychological theory, research, and practice in the business environment. Examines selection criteria and predictors, training and development, performance appraisal, employee motivation and satisfaction, and occupational health. Analyzes and evaluates effective teamwork strategies, leadership theories, and union-management relationships.

Course Pre-requisite(s)
Eligible to take ENG courses at HFC and MGT230 Principles of Management with a C grade or better

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. History of Industrial/Organizational (I/O) Psychology
2. Research Methods in Industrial/Organizational (I/O) Psychology
3. Criteria and Standards for Decision Making
4. Psychological Assessment Predictors
5. Human Resource Topics
6. Organizations and Organizational Change
7. Teams and Teamwork
8. Organizational Attitudes and Behavior
9. Workplace Psychological Health
10. Motivation
11. Leadership
12. Union-Management Relations

Define I/O psychology.
Differentiate between I/O psychology and other fields of psychology.
Explain the need for cross-cultural psychology.
Analyze the Empirical Research Process.
Compare and contrast primary and secondary research methods on the ability to obtain sound data.
Analyze ethical issues in research.
Criteria and Standards for Decision Making
Differentiate conceptual and actual criteria.
Explain criterion deficiency, relevance, and contamination.
Perform a work analysis.
Appraise the nine major job performance criteria.
Assess the quality of predictors using the concepts of reliability and validity.
Analyze the use of psychological tests and inventories, interviews, work samples, and situational exercises.
Discuss controversial methods of assessment.
Human Resource Topics
Analyze the social and legal context for sound human resource decisions.
Appraise the process for selecting, processing, placing, and classifying employees.
Compare and contrast training and development methodologies.

Examine the relationship between performance management and performance appraisal.

Differentiate performance appraisal methods.

Interpret the three theories of organizations.

Examine the components of social systems.

Evaluate downsizing, outsourcing, offshoring, mergers, acquisitions, globalization, and their effects on the organization.

Analyze organizational change and overcoming resistance to change.

Identify the different types of teams.

Discuss the benefits of teamwork.

Diagram team structure.

Interpret how teams make decisions and share mental models.

Examine the organizational attitudes of job satisfaction, job involvement, commitment and organizational justice, and their effects on the organization.

Evaluate how organizations affect employee behavior.

Apply the psychological contract concept to employee behavior.

Workplace Psychological Health

Analyze the relationship between mental, emotional, and physical well-being of employees and work/family conflict and how the relationships affect workplace behavior.

Explain the psychological effects of unemployment, reorganization, and other workplace stress.

Evaluate the effect of drug abuse and alcoholism on the workplace.

Examine the global exploitation of children in the workplace.

Compare and contrast motivational concepts and theories.

Apply motivational strategies.

Analyze the six major categories in leadership research.

Compare and contrast the theoretical approaches to leadership.

Analyze cross-cultural leadership issues.

Analyze diversity issues in leadership.

Describe the purpose of a union.

Illustrate the formation of a union and functions of the union contract.

Analyze research on union and management behaviors.

Assess the relationship of I/O psychology to industrial relations.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Students will be assessed through tests, quizzes, assignments, case studies, presentations, and/or class participation.

Grading Scale

LETTER GRADE	PERCENTAGE
A	93-100%
A-	90% - 92.9%
B+	87% - 89.9%
B	83% - 86.9%
B-	80% - 82.9%
C+	77% - 79.9%
C	73% - 76.9%
C-	70% - 72.9%
D+	67% - 69.9%
D	63% - 66.9%
D-	60% - 62.9%
E	<60% E

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for MGT 237

MGT241 - Small Bus Mgt & Entrepreneurship

Overview

Subject
Management

Academic Department
Business & Economics

School
Business, Entrepreneurshp, PD

Course Description
Examines the role of small business and entrepreneurship in the current economy with emphasis on launching and operating a new business. Also explores the purpose of and need for a business plan, and other important aspects such as financial needs, marketing plans, personnel and operational management, legal issues, and location. Includes the individual creation of a business plan for a start-up company.

Course Pre-requisite(s)
Eligible to take ENG courses at HFC

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Small Business and Entrepreneurship
2. Small Business Legal Forms
3. Financial Management
4. Legal Environment
5. Marketing
6. International Small Business
7. Professional Small Business Management
8. Human Resource Management
9. The Business Plan

1. Small Business and Entrepreneurship

a. Define small business.

b. Define entrepreneurship.

c. Appraise the characteristics of a small business.

d. Describe the characteristics of a successful entrepreneur.

e. Evaluate the advantages and disadvantages of being self-employed.

f. Discuss social responsibility, ethics, and strategic planning and the role they play in a small business.

g. Explain competitive advantage.

h. Write mission and vision statements.

2. Small Business Legal Forms

a. Compare and contrast the forms of business organization.

b. Compare and contrast franchising, buying an existing business, and starting a new business.

3. Financial Management

a. Analyze accounting records and financial statements.

b. Describe financial recordkeeping for a small business.

c. Describe methods for financing a small business.

4. Legal Environment

a. Identify the laws and regulations that affect a small business.

b. Explain the types of bankruptcy.

c. Examine the elements of a contract.

d. Discuss the protection of intellectual property.

5. Marketing

a. Evaluate the product-selection process.

b. Explain competitive advantage in product and business creation.

c. Analyze the role of inventory and methods of inventory control.

d. Describe small business distribution and channels of distribution.

e. Evaluate the elements for selecting a location.

f. Identify considerations in pricing.

g. Perform a breakeven analysis.

h. Describe promotional mix and the factors affecting it.

i. Explain how a small business can use and is affected by the Internet.

6. International Small Business

a. Identify factors to consider in globalization.

b. Discuss opportunities for importing and exporting.

c. Evaluate economic and cultural challenges.

7. Professional Small Business Management

a. Analyze management functions, activities, and organizational structures.

b. Describe the stages of small business growth and the accompanying managerial challenges.

8. Human Resource Management

a. Explain a job analysis and its purpose.

b. Compare and contrast recruitment sources.

c. Evaluate employee selection tools.

d. Categorize compensation and benefit systems.

e. Describe effective discipline and termination procedures.

f. Discuss employee training and development.

9. The Business Plan

a. Create a business plan containing: 1. Mission Statement 2. Vision Statement 3. Description of business and feasibility 4. Competitive analysis 5. Market analysis and plan 6. Sales projections 7. Location analysis 8. Formal financial information 9. Plan for obtaining financing

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Students will be assessed through tests, quizzes, assignments, and/or class participation, and creation of a business plan individually by each student.

Grading Scale

LETTER GRADE	PERCENTAGE
A	93-100%
A-	90% - 92.9%
B+	87% - 89.9%
B	83% - 86.9%
B-	80% - 82.9%
C+	77% - 79.9%
C	73% - 76.9%
C-	70% - 72.9%
D+	67% - 69.9%
D	63% - 66.9%
D-	60% - 62.9%
E	<60% E

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for MGT 241

MOA101 - Administrative Medical Procedures I

Overview

Subject
Medical Office Assistant

Academic Department
Health Careers

School
Health & Human Services

Course Description
Introduces the profession of medical assisting. Emphasizes administrative skills utilized in ambulatory care. Discusses administrative and clinical duties of the Medical Assistant Practitioner. Also includes but is not limited to medical office receptionist duties, maintaining medical records, billing and fee collection, medical practice finance, computer applications, and emergency preparedness.

Course Pre-requisite(s)
Permission of the program director and AH100 Medical Terminology with a C or better

Credit Hours
4

Total Contact Hours
Total Instructor Contact Hours:
62

Total Student Contact Hours:
62

Course Fee
50

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Introduction to Medical Assisting
2. Medical Law Ethics
3. Organization of the Health Care Delivery System
4. Patient Education
5. Patient Reception
6. Telephone Techniques
7. Managing Appointments
8. Written Communication
9. Health Information Management/Protection
10. Electronic Applications in the Medical Office
11. Medical Office Management
12. Emergency Preparedness
13. Credit Arrangements and Fee Collection
14. Medical Bookkeeping and Accounting
15. Banking Services and Procedures
16. Career Strategies

Describe the professional role of the medical assistant.
Define the legal scope of practice for a medical office assistant.
Describe the administrative and clinical duties of the medical assistant.
Explain fees, credit arrangements related to reimbursement for services.
Explain the importance of obtaining certification for the medical assistant.
Perform telephone triage of emergency patients.
Utilize open-ended interview questions to assess the patient.
Perform Computer Prescription Order Entry (CPOE)
Discuss the career options available to a properly credentialed medical assistant or medical insurance specialist.
Demonstrate honesty and integrity in the performance of all medical business practices.
Demonstrate empathy and awareness of other's feelings when communicating with patients, physicians, and staff members.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of academic achievement will be determined using a combination of learning activities, participation, unit tests and final examination.

General Course Requirements and Recommendations
Emphasis will be on individual learning experiences which will include active participation of students in classroom activities. A cooperative rather than a competitive atmosphere is encouraged. Students are responsible for making arrangements in advance of an absence with a classmate to obtain any missed work. This course will consist of specific units of study. Each student is responsible for completion of all the required (*) learning competencies. Students must be present for the final examination.

Grading Scale
The grading scale is:

- 99-100% = A+
- 94-98% = A

- 90-93% = A-
- 87-89% = B+
- 83-86% = B
- 80-82% = B-
- 76-79% = C+
- 70-75% = C
- 65-69% = D+
- 60-64% = D
- 59% and below = E

The course grade is based on four components. Unit tests 30%Learning activities 30%Class attendance/participation 10%Final Examination 30%

Texts
Required textbooks will be determined by department faculty.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for MOA 101

MOA110 - Processing Health Insurance Claims

Overview

Subject
Medical Office Assistant

Academic Department
Health Careers

School
Health & Human Services

Course Description
An introductory-level insurance billing course centering on the medical office. Presents the coding systems used in conjunction with the International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) and the Current Procedural Terminology (CPT) manual. Also discusses how information is used to process health insurance claims for Blue Cross/Blue Shield (BCBS), Medicare, Medicaid, Tricare, Commercial, and Workers Compensation.

Course Pre-requisite(s)
AH100 Medical Terminology with a C grade or higher, Permission of Program Director

Credit Hours
2

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
70

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Introduction to Medical Insurance
2. Insurance Specialist & Medical Assistant-Roles & Responsibilities
3. Diagnostic Coding
4. Procedure Coding
5. Healthcare Common Procedure Coding System (HCPCS) Coding
6. The Life Cycle of an Insurance Claim
7. Managed Health Care
8. Blue Cross Blue Shield (BCBS)
9. Medicaid
10. Medicare
11. Tricare
12. Commercial Insurance Carriers
13. Ethical and legal standards in business practices

Describe the process used to identify and select diagnostic codes using the ICD-10-CM coding system.
Describe the process used to identify and select procedure codes using the CPT manual coding system.
Describe the process used to identify and select procedure codes using the HCPCS coding system.
Complete an insurance claim form for the following carriers: Blue Cross/ Blue Shield (BCBS),Health Maintenance Organization (HMO), Medicare, Medicaid, Tricare, and Worker's Compensation.
Utilize the ICD-10-CM and the CPT manuals to complete a paper-based and an electronic insurance claim form.
Explain the advantages of the Affordable Care Act and how it impacts the delivery of health care in ambulatory services.
Demonstrate honesty and integrity in the performance of medical billing and insurance coding practices.
Apply ethical and legal standards in the performance of all medical business practices.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment will consist of learning activities, participation, examinations and a final exam.

The following four components identify the value given to each assessment category. *Examinations, 30%* Learning Activities, 30% *Attendance/ Participation, 10%* Final Examination, 30%

Grading Scale
Grades will be assigned using the following scale:

- 97-100% = A+
- 95-96% = A
- 93-94% = A-
- 91-92% = B+
- 88-90% = B
- 85-87% = B-
- 83-84% = C+
- 80-82% = C
- 78-79% = D+
- 76-77% = D

- 72-75% = D-
- 71% and below = E

Texts
Required textbooks to be determined by department faculty.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for MOA 110

MOA122 - Intro to Medical Assistant Clinical Proc

Overview

Subject
Medical Office Assistant

Academic Department
Health Careers

School
Health & Human Services

Course Description
An introductory level clinical course for students in the medical assistant program. The student will wear program clinical attire, (HFC scrubs, lab coat), and will be introduced to OSHA, CDC, emergency preparedness, along with universal and standard precautions. The student will be able to apply safety knowledge learned in the course while mastering content in the class such as a complete physical exam, specialty exams, patient transfer and vital signs.

Course Pre-requisite(s)
AH132 Intro to Healthcare Profession and permission of program director

Credit Hours
2

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
100

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. OSHA, universal and standard precautions
2. Measure and record vital signs
3. Complete physical exam
4. Specialty exams
5. Patient transfer

Compare structure and function of the human body across the life span.
Describe the infection cycle including: The infectious agent, Reservoir, Susceptible host, Means of transmission, Portals of entry, Portals of exit.
Identify methods of controlling the growth of microorganisms.
Define the principles of standard precautions.
Define personal protective equipment (PPE) for: All body fluids, secretions, and excretions, Blood, Non-intact skin, Mucous membranes.
Measure and record: Height, Weight, Length (infant), Head circumference (infant), Pulse oximetry.
Perform pulmonary function testing.
Perform patient screening using established protocols.
Instruct and prepare a patient for a procedure or a treatment.
Assist provider with a patient exam.
Document on a growth chart.
Participate in blood-borne pathogen training.
Select appropriate barrier/personal protective equipment (PPE).
Demonstrate proper disposal of biohazardous material: Sharps, Regulated wastes.
Document patient care accurately in the medical record.
Develop a plan for separation of personal and professional ethics.
Incorporate critical thinking skills when performing patient assessment.
Incorporate critical thinking skills when performing patient care.
Show awareness of a patient's concerns related to the procedure being performed.

Recognize the implications for failure to comply with Center for Disease Control (CDC) regulations healthcare settings.

Explain to a patient the rationale for performance of a procedure.

Demonstrate sensitivity to patient rights.

Protect the integrity of the medical record.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement

- Cognitive assessment will be done through various program rubrics, quizzes, and tests, that align with the national standards and guidelines curriculum for medical assistants. (MAERB)
- Program rubrics will be used to assess demonstration of competencies for the required psychomotor standards of the program, with critical elements identified. Students will use student centered learning stations set up in the classroom to re-mediate, and to initiate various scenario possibilities to ensure that students have strong clinical and critical thinking/problem solving skill sets.
- Appropriate assessment methods will be used to analyze cognitive retention, application to environment/scenario, while following all required industry safety standards.

Grading Scale
Students will be assessed on the following scale:

The grading scale is:

- 99-100% = A+
- 94-98% = A
- 90-93% = A-
- 87-89% = B+
- 83-86% = B
- 80-82% = B-
- 76-79% = C+
- 70-75% = C
- 65-69% = D+
- 60-64% = D
- 59% and below = E

All medical assistant students will be required to follow national accreditation guidelines and pass 100% of all psychomotor and affective competencies, and pass the cognitive domain at a minimum of 85% to pass the class, and move forward to MOA-150.

Texts
Determined by program faculty.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for MOA 122

MOA152 - Medical Assistant Clinical Procedure II

Overview

Subject
Medical Office Assistant

Academic Department
Health Careers

School
Health & Human Services

Course Description
An advanced-level medical assistant course that explores the clinical functions of the medical practice. Presents topics such as phlebotomy, administration of medication, electrocardiography, assisting with minor surgery, and treatments. Students practice the concepts of medical and surgical asepsis, and routine diagnostic tests and procedures.

Course Pre-requisite(s)
MOA101 Admin Medical Procedures I and MOA122 Intro Med Asst Clinical Proced with a grade B- or higher, and MATH100 Basic Tech Mathematics or higher with a C or higher , and BIO134 Essentials Anatomy&Physiology with a C or higher or (BIO233 Anatomy and Physiology I and BIO234 Anatomy and Physiology II with a C grade or better).

Credit Hours
5

Total Contact Hours

Total Instructor Contact Hours:
107

Total Student Contact Hours:
107

Course Fee
110

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Medical and Surgical Asepsis
2. Minor Surgery
3. Sterilization and Disinfection
4. Pharmacology
5. Administration of Medications
6. Hematology
7. Phlebotomy
8. Spirometry: Peak Flow Measurements
9. Electrocardiogram
10. Special Populations: Pediatrics and Geriatrics
11. Medical Laboratory Tests: Blood Chemistry, Microbiology and Urinalysis

Explain the principles of medical vs surgical asepsis.

Describe the physical examination procedure including equipment, and patient preparation.

Discuss the pharmaceutical agents (medications) required for the medical office assistant.

Demonstrate competence in all required clinical procedures in the laboratory setting.

Calculate common medical dosages seen in medical assisting.

Enter medication into the Computer Pharmacy Order Entry System.

Apply OSHA Standard Precautions in the performance of all job duties.

Demonstrate empathy in personal interactions with patients, physicians and staff members.

Demonstrate awareness of the legal scope practice for medical assistants.

Perform all clinical procedures according to the ethical standards of the profession.

Perform: electrocardiography, venipuncture, capillary puncture, pulmonary function testing

Perform patient screening using established protocols

Verify the rules of medication administration: right patient, right medication, right dose, right route, right time, right documentation

Select proper sites for administering parenteral medication

Administer oral medications

Administer parenteral (excluding IV) medications

Instruct and prepare a patient for a procedure or a treatment
Assist provider with a patient exam
Perform a quality control measure
Obtain specimens and perform: CLIA waived hematology test, CLIA waived chemistry test, CLIA waived urinalysis, CLIA waived microbiology test
Calculate proper dosages of medication for administration
Differentiate between normal and abnormal test results
Maintain lab test results using flow sheets
Document on a growth chart
Prepare items for autoclaving
Perform sterilization procedures
Prepare a sterile field
Perform within a sterile field
Perform wound care
Perform dressing change
Demonstrate proper disposal of biohazardous material: sharps, regulated waste
Instruct a patient according to patient's special dietary needs
Perform compliance reporting based on public health statues
Report an illegal activity in the healthcare setting following proper protocol
Complete an incident report related to an error in patient care
Comply with: safety signs, symbols, labels
Demonstrate proper use of: eyewash equipment, fire extinguishers, sharp disposal containers
Use proper body mechanics
Participate in a mock exposure event with documentation of specific steps
Evaluate the work environment to identify unsafe working conditions

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
The emphasis in this course will be on individual learning experience which will include active student participation in classroom and laboratory activities, A cooperative rather than a competitive learning atmosphere is encouraged. Students are expected to attend all classroom and laboratory sessions. Assessment of academic achievement will be determined using a combination of learning activities, participation, examinations, and the final exam.

Grading Scale
The grading scale is:

A+ = 99-100%
A = 94-98%
A- = 90-93%
B+ = 87-89%
B = 83-86%
B- = 80-82%
C+ = 76-79%
C = 70-75%
D+ = 65-69%
D = 60-64%
E = 59% and below

The final course grade will determined using the following criteria:

Examinations, 30%
Learning Activities, 30%
Attendance/Participation, 10%
Final Examination, 30%

Texts
Required textbooks will be determined by the department faculty.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for MOA 152

MOA165 - Physician Billing Concepts

Overview

Subject
Medical Office Assistant

Academic Department
Health Careers

School
Health & Human Services

Course Description
This course is designed to build upon the knowledge gained in MOA-101, and MOA-110. The process of electronic claims preparation is practiced through classroom simulations. The student will use medical office computer applications to establish patient, insurance, facility data bases. This information allows the user to prepare statements, bill insurance companies, post payments to the patient account, and generate statements and other financial documents utilized in the physician's office.

Course Pre-requisite(s)
AH100 Medical Terminology with a C grade or better, either prior or at the same time

Credit Hours
4

Total Contact Hours
Total Instructor Contact Hours:
62

Total Student Contact Hours:
62

Course Fee
20

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Office Ergonomics
2. Paper Claims: Commercial, Blue Cross/Blue Shield(BCBS), and Medicaid
3. Electronic Claims: Commercial, Blue Cross/Blue Shield (BCBS), and Medicaid
4. Ethical/Legal Standards in Claims Preparation
5. Patient Intake Procedures
6. Patient Statements
7. Accounts Receivable

Initiate patient registration and verify current insurance coverage.
Explain the Health Maintenance Organization (HMO) referral and authorization request process.
Use the Current Procedural Terminology (CPT) and International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) to demonstrate medical necessity for billing.
Perform insurance verification, certification, and authorization for health insurance carriers such as Blue Cross/Blue Shield (BCBS), Medicaid, and Health Maintenance Organization (HMO) plans.
Construct a complete electronic claim for traditional insurance carriers such as BC/BS, Medicare, Medicaid, Commercial Carriers, Tricare, and Workmen's Compensation.
Demonstrate scope of practice for a medical insurance specialist.
Demonstrate honesty and integrity in the performance of all medical business practice.
Exercise ethical/legal standards in claims preparation and submission.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of academic achievement will be based on assignments, quizzes, unit tests, and final examination.

General Course Requirements and Recommendations
Emphasis will be placed upon individual learning experience. Active participation in class assignments will be encouraged and required. A cooperative rather than competitive atmosphere will be encouraged. In case of absence, it is the student's responsibility to obtain missed information from a classmate. A test will be administered at the completion of each unit. Each student is responsible for completion of the worksheets and review questions as assigned.

Grading Scale
Student grades will be assigned using the following scale:

- 98-100% = A+
- 93-97% = A
- 90-92% = A-
- 87-89% = B+
- 83-86% = B
- 80-82% = B-
- 76-79% = C+
- 70-75% = C
- 67-69% = D+
- 63-66% = D
- 60-62% = D-
- 59% & below = E

The course grade will be based on the following criteria:
Examinations(unit tests); 30%
Case Studies/Assignments; 30%
Professionalism/Participation; 10%
Final Examination;30%

Texts
Required textbooks determined by the program faculty.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for MOA 165

MOA168 - Facility Billing Concepts

Overview

Subject
Medical Office Assistant

Academic Department
Health Careers

School
Health & Human Services

Course Description
Focuses on the billing process unique to health care facilities. Examines the hospital billing environment, coding, payment methods, and Uniform Billing Forms for Hospitals claims along with billing simulations.

Course Pre-requisite(s)
AH100 Medical Terminology, HIT150 Basic Code: Theory & Practice, MOA165 Physician Billing Concepts with a "C" grade or better.

Credit Hours
4

Total Contact Hours
Total Instructor Contact Hours:
62

Total Student Contact Hours:
62

Course Fee
20

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. The Hospital Environment
2. Types of Facilities
3. Hospital Billing Process
4. Patient Registration
5. Accounts Receivable Management
6. Hospital Medical Insurance
7. Center for Medicare and Medicaid Services (CMS)
8. Skilled Nursing Facility Consolidated Billing
9. International Classification of Diseases, Tenth Revision (ICD-10) Diagnostic and Surgical Codes
10. Uniform BIlling Form for Hospital

Outline the key elements of hospital billing systems.
Compare and contrast the types of billing systems.
Discuss the hospital insurance billing process.
Explain hospital insurance coding and payment methods.
Describe the use of the Uniform billing claim used by hospitals and ambulatory centers to bill medicare and third party payers.
Explain condition, occurrence, and value coding.
Relate revenue coding to charges.
Explain diagnosis and procedure coding.
Prepare a successful Uniform Billing Form for Hospitals claim form.
Explain revenue coding to charges.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of academic achievement will include assignments, quizzes, and tests.
General Course Requirements and Recommendations
Active participation in class assignments will be encouraged and required. Cooperative rather than a competitive atmosphere will be encouraged.

- Students are expected to attend all sessions of the class.
- In case of absence, it is the student's responsibility to contact a classmate in advance to obtain missed materials.
- Failure to officially withdraw from the class may result in a grade of E.

Students graduating from the Medical Insurance Specialist program should be able to demonstrate cognitive knowledge based on academic subject matter required for competence in the field. They will be able to incorporate cognitive knowledge in the performance of psychomotor and affective learning domains.

Grading Scale
Grades will be assigned using the following scale:

- 98-100% = A+
- 93-97% = A
- 90-92% = A-
- 87-89% = B+
- 83-86% = B
- 80-82% = B-
- 76-79% = C+
- 70-75% = C
- 67-69% = D+
- 63-66% = D
- 60-62% = D-
- 59% & below = E

Texts
Required textbooks to be determined by program faculty.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for MOA 168

MOA170 - Med Correspond - Electronic Hlth Record

Overview

Subject
Medical Office Assistant

Academic Department
Health Careers

School
Health & Human Services

Course Description
Focuses on the variety of medical correspondence found in ambulatory health care facilities. Introduces the procedures used for initiating and documenting patient care using an electronic health record system. Also covers medical office workflow, practice finance, medical billing and coding, clinical procedures, and administrative functions of the front office. Laboratory activities.

Course Pre-requisite(s)
MOA101 Admin Medical Procedures I, MOA110 Process Hlth Insurance Claims andBIO134 Essentials Anatomy&Physiology or (both BIO233 Anatomy and Physiology I and BIO234 Anatomy and Physiology II); all with a C grade or better.

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
62

Total Student Contact Hours:
62

Course Fee
53

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Introduction to Electronic Health Records
2. Medical Office Workflow
3. Appointment Scheduling
4. Patient Registration
5. Open Orders Processing
6. Referrals
7. Patient History and Physical Examination
8. Prescribing Medications
9. Evaluation/Management
10. Accounts Receivable
11. Posting Charges and Payments
12. Billing and Coding Using the EHR
13. Administrative and Charting Duties Using the EHR
14. Clinical Case Studies
15. Front-Desk Case Studies

Describe the history of electronic health records.

Differentiate between open and closed systems.

Describe the Medical Office Workflow.

Explain the role of HITECH.

Describe the purpose and function of CCHIT.

Discuss the impact of the AARA.

Describe major insurance carriers.

Describe evaluation and management levels of service.

Psychomotor Domain

Perform Patient Registration.

Perform documentation of patient care.

Perform medical billing procedures. *Complete a workflow clinical case study using all components of the electronic health record.

Describe the importance of participating in continuing education activities to increase knowledge and use of electronic health records.

Demonstrate honesty and integrity in the performance of all administrative and clinical medical assistant duties.

Explain the importance of following HIPAA guidelines regarding confidentiality and security in regard to protected health information.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of academic achievement will include assignments, worksheets, group project, tests and final exam.

The following weighted percentages will be used when determining the assigned final grade:
Worksheets: 15% Assignments: 20% Tests: 15% Group Projects: 25% Final Exam: 25%

General Course Requirements and Recommendations
The student will require access to the internet to complete homework assignments outside of class.

Emphasis will be directed toward helping each student achieve the required goals. Students are responsible for all material and assignments. Students are expected to spend time outside of class studying and practicing new skills.

Medical Assistant students graduating from a program accredited through the Commission on Accreditation of Allied Health Education Programs (CAAHEP) will demonstrate cognitive knowledge based on academic subject matter required for competence in the field. They will be able to demonstrate cognitive knowledge in the performance of psychomotor and affective learning domains.

Grading Scale
Student grades will be assigned using the following scale:

- 98-100% = A+
- 93-97% = A
- 90-92% = A-
- 87-89% = B+
- 83-86% = B
- 80-82% = B-
- 76-79% = C+
- 70-75% = C
- 67-69% = D+
- 63-66% = D
- 60-62% = D-
- 59% & below = E

Texts
Required textbooks to be determined by program faculty.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for MOA 170

MOA181 - Medical Collection and Legal Issues

Overview

Subject
Medical Office Assistant

Academic Department
Health Careers

School
Health & Human Services

Course Description
An advanced physician billing course focusing upon payment posting, fee schedules, HMO capitation reports, rejections, billable/non-billable services, claim status, and collections. Also discusses ethics in relation to billing and billing issues.

Course Pre-requisite(s)
HIT151 Basic Med Coding: Theory/Pract , MOA165 Physician Billing Concepts, and AH100 Medical Terminology all with a "C" grade or higher.

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
20

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Data Management Terms, Review Center for Medicare and Medicaid Services, Blllling Forms, Type and Place Codes.
2. Pre-Test Paper and Electronic Claim Forms for Medicare, Medicaid, Commercial, and Traditional Insurance Carriers such as Blue Cross/ Blue Shield
3. HIPAA/Referrals
4. Post Payments for Traditiional Health Insurance Carriers such as Blue Cross and Blue Shield and Coordination of Benefits (COB) Claims
5. Post Payments for Traditional Health Insurance Carriers such as Blue Cross and Blue Shield (Electronic)
6. Working Rejections and Traditional Health Insurance Carrier Corrections
7. Post Payments for Medicare Paper and COB Claims
8. Post Payments for Medicare Electronic
9. Working Rejections and Medicare Corrections

Determine the approved amount with appropriate adjustments for payment and co-payment factors.

Demonstrate both manual and computer post payments.

Analyze work rejections; and relate to write offs, re-billing, and status.

Formulate bills for second- and third-insurance carriers.

Generalize the basic collection laws.

Prepare capitation reports/referrals.

Analyze the impact of Health Insurance Portability and Accountability Act of 1996 (HIPAA) upon the billing process.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of academic achievement will include participation, assignments, quizzes, tests, and final exam.

General Course Requirements and Recommendations
Students graduating from the Medical Insurance Specialist program will demonstrate cognitive knowledge based on academic subject matter. They will incorporate cognitive knowledge in the performance of psychomotor and affective learning domains.

Grading Scale
Student grades will be assigned using the following scale:

Grading scale:

- 98-100% = A+
- 93-97% = A
- 90-92% = A-
- 87-89% = B+
- 83-86% = B
- 80-82% = B-
- 76-79% = C+
- 70-75% = C
- 67-69% = D+
- 63-66% = D
- 60-62% = D-
- 59% & below = E

Texts
Required textbooks to be determined by program faculty.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for MOA 181

MOA190 - Medical Office Externship

Overview

Subject
Medical Office Assistant

Academic Department
Health Careers

School
Health & Human Services

Course Description
Offers a capstone clinical externship for the medical assistant student, including 165 hours of clinical experience at an assigned ambulatory care facility. The course Includes a structured class component.

Course Pre-requisite(s)
MOA152 Med Assist. Clinical Proc II, with a B- grade or higher

Credit Hours
4

Total Contact Hours

Total Instructor Contact Hours:
173

Total Student Contact Hours:
173

Course Fee
20

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Administrative Competencies
2. Clerical Functions
3. Perform Bookkeeping Procedures
4. Process Insruance Claims
5. Clinical Competencies
6. Fundamental Procedures
7. Specimen Collection
8. Diagnostic Testing
9. Patient Care
10. General Competencies
11. Professional Communications
12. Legal Concepts
13. Patient Instruction
14. Operational Functions

Perform clerical functions including scheduling appointments, referrals, and organizing medical records.

Perform bookkeeping procedures including accounts receivable and accounts payable procedures.

Perform fundamental procedures including handwashing, standard precautions, disposal of biohazardous materials, and sterilization techniques.

Perform electrocardiography, respiratory tests and CLIA Waived tests.

Perform in-person and telephone triage.

Record vital signs.

Administer oral and parenteral (excluding IV) medications.

Perform within the legal scope of practice for the medical assistant.

Demonstrate knowledge and role of the medical assistant in emergency preparedness.

Design an emergency evacuation plan.

Display the appropriate professional behaviors required of a medical assistant in an ambulatory care setting.

Deliver an instructional session on either health maintenance or disease prevention for a selected patient according to their needs.

Perform a successful venipuncture on a selected patient following proper procedures and techniques.

Outline the American Association of Medical Assistants (AAMA) certification process.

Describe the benefits of the Certified Medical Assistant (CMA) designation.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of academic achievement will include weekly clinical journals, midterm evaluation, externship experience checklist, class presentations and assignments, completion and adherence to student contract and mock CMA exam.

General Course Requirements and Recommendations

1. The program needs to ensure that the externship experience and instruction of students are meaningful and parallel in content and concept with materials presented in lecture and laboratory sessions. Clinical externship sites should be selected so that each student is afforded a variety of experiences, while at the same time all students are provided consistent learning opportunities.
2. Accreditation standards require that students do not receive compensation/payment, monetary or otherwise, from any clinical site for any portion of their clinical externship. A supervised, unpaid externship at an ambulatory health care setting performing administrative and clinical procedures must be completed prior to graduation.

Grading Scale
Student grades will be assigned using the following scale:

The grading scale is:

- 99-100% = A+
- 94-98% = A
- 90-93% = A-
- 87-89% = B+
- 83-86% = B
- 80-82% = B-
- 76-79% = C+
- 70-75% = C
- 65-69% = D+
- 60-64% = D
- 59% and below = E

Texts
MOA Student Handbook

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for MOA 190

MOA205 - Insurance Coding & Reimbursement

Overview

Subject
Medical Office Assistant

Academic Department
Health Careers

School
Health & Human Services

Course Description
Further develops the methods and skills necessary for optimal reimbursement for services rendered in a healthcare setting. Explores billing and reimbursement cycle, HIPAA, diagnostic coding and procedural coding, coding compliance, and claims processing as well as physician and hospital coding reimbursement. Also provides an overview of the key financial circumstances impacting the healthcare delivery system.

Course Pre-requisite(s)
HIT151 Basic Med Coding: Theory/Pract , MOA165 Physician Billing Concepts, and AH100 Medical Terminology all with a "C" grade or higher.

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
20

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. The Healthcare Environment
2. Revenue Reimbursement Cycle of Physician and Hospital
3. Claims Processing and Compliance
4. Center for Medicare and Medicaid Services (CMS):
5. Overview of Medicare
6. Overview of Medicaid
7. Uniform Billing Form for Hospital
8. CMS Form 500, Uniform Billing Form for Physician
9. HIPAA Transactions Overview (Testing and Certification)
10. Submitting Claims/Claims Adjustments/Troubleshooting Claims

Explain the billing and reimbursement cycle.
Discuss Health Insurance Portability and Accountability Act of 1996 (HIPAA) and Legal Medical Record compliance in relation to medical billing.
Differentiate between diagnostic coding and procedural coding in relation to reimbursement.
Apply standards of coding compliance.
Summarize provider charges and payment methods.
Describe claims processing, follow-up and collections.
Compare and contrast physician and hospital coding reimbursement.
Demonstrate honesty and integrity in the performance of all medical billing practices.
Apply ethical and legal standards to the performance of insurance billing for reimbursement.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of academic achievement will include participation, assignments, quizzes, tests and final exam.

General Course Requirements and Recommendations
Instructors (or their designees) reserve the right to require students to provide proper picture identification for test taking, submission of graded papers, projects or other appropriate applications.
Active participation in class assignments will be encouraged and required. Cooperative rather than competitive atmosphere will be encouraged.

Students graduating from the Medical Insurance Specialist Program should be able to demonstrate cognitive knowledge based on academic subject matter required for competence. They will incorporate cognitive knowledge in the performance of psychomotor and affective learning domains.

Grading Scale
Student grades will be assigned using the following scale:

- 98-100% = A+
- 93-97% = A
- 90-92% = A-
- 87-89% = B+
- 83-86% = B
- 80-82% = B-
- 76-79% = C+
- 70-75% = C
- 7-69% = D+
- 63-66% = D
- 60-62% = D-

- 59% & below = E

Texts
Required textbooks to be determined by program faculty.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for MOA 205

MTT100 - Machine Tool Processes I

Overview

Subject
Machine Tool Technology

Academic Department
Adv Manufacturing/Fabrication

School
Business, Entrepreneurshp, PD

Course Description
An entry-level course in manufacturing processes involving turning, threading, drilling, reaming, tapping, and milling. Covers part processing, machines, and tooling used along with speeds and feeds and inspection techniques in relation to operations. Safety is an integral part of the course. Laboratory activities.

Credit Hours
4

Total Contact Hours
Total Instructor Contact Hours:
92

Total Student Contact Hours:
92

Course Fee
50

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
Student Interview and Portfolio Review

Goals, Topics, and Objectives

Core Course Topics
1. Lab orientation, safety, and machining tips
2. Make-up and carbon content of various metals
3. Measuring tools and instruments
4. Tolerances
5. Hand tools and layout
6. Threads and fasteners
7. Lathe, safety and correct use of the machine
8. Thread cutting on the lathe
9. Vertical milling machines, safety, and correct use of the machine
10. Milling tools
11. Feeds and speeds for different machines and metals
12. Outside diameter (O.D.) grinder use and safety
13. Surface grinder

Implement proper safety practices regarding machine tools.
Recognize proper set up for basic machine tool operations.
Determine proper speeds and feeds for machining.
Determine proper tooling for operations to be performed.
Apply proper gauging instruments for tolerances specified.
Process basic parts to completion.
Analyze completed part accuracy.

Assessment, Requirements, and Outcomes

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for MTT 100

MTT102 - Hand and Power Tools

Overview

Subject
Machine Tool Technology

Academic Department
Adv Manufacturing/Fabrication

School
Business, Entrepreneurshp, PD

Course Description
Introduces safe and effective use of hand and power tools. Emphasizes the application of tools most commonly used by industrial technicians.

Credit Hours
1

Total Contact Hours
Total Instructor Contact Hours:
16

Total Student Contact Hours:
16

Course Fee
20

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Departmental Exam, Skilled Demonstration

Credit for Prior College Level Learning (CPCLL) Details
Departmental Exam

Skilled Demonstration

Goals, Topics, and Objectives

Core Course Topics
1. Safety
2. Hand Tools and Bench Work
3. Power Tools

Demonstrate satisfactory knowledge of hand and power tool safety.
Use hand and bench tools properly.
Use power tools properly.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Labs, projects, assignments, quizzes, tests, exams.

Texts
To be determined by instructor.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for MTT 102

MTT105 - Print Reading for Manufacturing

Overview

Subject
Machine Tool Technology

Academic Department
Adv Manufacturing/Fabrication

School
Business, Entrepreneurshp, PD

Course Description
Surveys the fundamentals of print reading and focuses on concepts and techniques used in various segments of the manufacturing industry. Covers print reading components, such as title blocks, parts lists, geometric terms, and construction. Topics include how to read multi-view drawings, which include section views and auxiliary views, and how to develop strategies for recognizing part shape and size through multiple styles of industrial drawings. Also emphasizes an understanding of part process completion, industrial materials, fasteners, cams, gears, numerical control, and surface finish.

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
50

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
Student Interview and Portfolio Review

Goals, Topics, and Objectives

Core Course Topics

1. Introduction to Drafting and Print Reading
2. Object Representation
3. Sectional and Auxiliary Views
4. Measuring Systems
5. Geometric Dimensioning and Tolerancing
6. Detail and Assembly Prints
7. Materials and Machining
8. Threads and Fasteners
9. Gears and Cams
10. Numerical Control

Identify parts of an industrial drawing.

Recognize basic views of projection.

Explain various parts of a title block.

Identify different line types: hidden lines, center lines, and object lines.

Interpret drafting symbols, tolerance, and dimensioning.

Propose processes necessary for part completion and materials needed.

Visualize a completed part from the information given in a drawing.

Analyze assembly drawings by examining individual components.

Assessment, Requirements, and Outcomes

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for MTT 105

MTT110 - Machine Tool Processes II

Overview

Subject
Machine Tool Technology

Academic Department
Adv Manufacturing/Fabrication

School
Business, Entrepreneurshp, PD

Course Description
A hands-on course offering advanced manufacturing processes experience on the lathe, mills, and grinders. Emphasizes the proper usage and safety protocols of equipment and tools used in performing machining operations. Also covers the efficient use and the troubleshooting of carbide, ceramic, and diamond-cutting tool materials.

Course Pre-requisite(s)
MTT100 Machine Tool Processes I

Credit Hours
4

Total Contact Hours
Total Instructor Contact Hours:
92

Total Student Contact Hours:
92

Course Fee
50

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
Student Interview and Portfolio Review

Goals, Topics, and Objectives

Core Course Topics

1. Safety review
2. Preparation for Machining (S/F & GD & T)
3. Advanced Milling Machine operations.
4. Threads and thread cutting.
5. Mill Cutters and Machinability of materials.
6. Cutting Tools & Tool Life.
7. Speeds/Feeds.
8. Tapers.
9. Rapid Spacers – Dividing Head.
10. Special Milling Operations.
11. Gears & Gear Cutting.
12. Carbide, Ceramic, and Diamond Tools.
13. Abrasives – Grinder

Implement proper safety practices regarding machine tools.

Select and apply abrasives efficiently.

Identify tapers and their application.

Describe gears and their application.

Determine proper machine setup for part interchangeability.

Interpret surface-finish characteristics.

Interpret GD & T symbols and their applications.

Assessment, Requirements, and Outcomes

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for MTT 110

MTT120 - Practical Problems in Machine Tools I

Overview

Subject
Machine Tool Technology

Academic Department
Adv Manufacturing/Fabrication

School
Business, Entrepreneurshp, PD

Course Description
Explores how to increase machining efficiency and quality of workmanship. Individualized instruction helps the student overcome deficiencies in machining on the lathe and vertical milling machine. Emphasizes tool sharpening, set-up, and safety protocols.

Course Pre-requisite(s)
MTT110 Machine Tool Processes II

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
62

Total Student Contact Hours:
62

Course Fee
50

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
Student Interview and Portfolio Review

Goals, Topics, and Objectives

Core Course Topics

1. Safety review.
2. Preparation for Machining, Tolerance.
3. Metals – Machinability – Speed & Feed.
4. Application of Cutting Tool Materials.
5. Sharpening Cutting Tools.
6. Mill Cutters, Feed & Speed.
7. Tram Heads & Align Vises & Nest Work-pieces.
8. Layout Tools.
9. Taps, Drills, and Reamers.
10. Hand Tools.
11. Fasteners & Threads.
12. Abrasives/Grinders.
13. Basic Heat-Treat Processes.

1. Implement proper safety practices regarding machine tools.

2. Recognize proper set up for basic machine tool operations.

3. Determine proper speeds and feeds for machining.

4. Choose proper tooling for operations to be performed.

5. Apply proper gaging instruments for tolerances specified.

6. Process basic parts to completion.

7. Analyze completed part accuracy.

Assessment, Requirements, and Outcomes

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for MTT 120

MTT130 - Quality Control Gaging & Inspection

Overview

Subject
Machine Tool Technology

Academic Department
Adv Manufacturing/Fabrication

School
Business, Entrepreneurshp, PD

Course Description
An entry-level course covering the following manufacturing inspection methods: layout, surface plate techniques, tool and instrument reading and uses, and floor and receiving inspection. Also discusses surface finish measurement, introduction to SPC techniques, and GDT. Laboratory activities.

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
62

Total Student Contact Hours:
62

Course Fee
50

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
Department approval

Goals, Topics, and Objectives

Core Course Topics

1. History and Basic Principles
2. Definitions – Terms
3. Reference Prints
4. Line Measurement
5. Selection and Care of Instruments and Tools
6. Micrometers & Verniers
7. Fixed Cages a Comparative Measurement
8. Precision Gage Blocks & Calibration
9. Surface Plate Techniques & Accessories
10. Inspection of Machined Parts
11. Dial Gages & Test Indicators
12. Metrics
13. Angular Measurement
14. Screw Threads (English & Metric)
15. Gage Checking & Control
16. Surface Finish
17. Pneumatic, Electronic, and Optical Equipment
18. Hardness Testing
19. CMM
20. Non-destructive Testing
21. Use of and Introduction to SPC

Apply U.S. customary and metric units of measure and their conversions. (Imperial measure as in Canada).

Demonstrate the use of terminology used in manufacturing and quality assurance.

Identify the various precision tools, gages and equipment and their applications.

Prepare and read gaging instruments to tolerances specified.

Evaluate the inspection of parts utilizing a rational approach to inspection techniques.

Assessment, Requirements, and Outcomes

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for MTT 130

MTT140 - Introduction to CNC

Overview

Subject
Machine Tool Technology

Academic Department
Adv Manufacturing/Fabrication

School
Business, Entrepreneurshp, PD

Course Description
An entry-level course covering the basic concepts of computer numerical control (CNC). Also explores set-up, operation, and programming of a CNC mill and CNC lathe. Laboratory activities.

Course Pre-requisite(s)
MTT100 Machine Tool Processes I

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
62

Total Student Contact Hours:
62

Course Fee
50

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
Student Interview and Portfolio Review

Goals, Topics, and Objectives

Core Course Topics

1. Introduction to Numerical Control / History of CNC Milling and Turning
2. Milling Machine Programming
3. CAD/CAM
4. CNC/DNC
5. Program Set-Up
6. G & M codes
7. Milling Machine Set-up
8. Machine Axis and Nomenclature
9. Right hand coordinate System
10. Axis Motion
11. EIA standards: RS-267-A
12. Cartesian Coordinate System
13. Fixed Zero / Floating Zero
14. Introduction to Right Angle Trigonometry
15. Manual Contour Programming
16. Machine Start Up
17. Cutter Compensation
18. Setting Zero
19. Pocket Milling
20. CNC Lathe - Operation / Program

Identify axis motion nomenclature of CNC machines.

Apply absolute and incremental programming techniques to CNC programming.

Calculate tool position using right-angle trig.

Write a simple program for drilling on a VMC.

Write a simple milling program employing cutter compensation with both linear and circular interpolations.

Assessment, Requirements, and Outcomes

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for MTT 140

MTT145 - CNC Operations

Overview

Subject
Machine Tool Technology

Academic Department
Adv Manufacturing/Fabrication

School
Business, Entrepreneurshp, PD

Course Description
Introduces the concept of computer numerical control (CNC) operations as they exist in the manufacturing environment. Examines setup, operation, and programming of the CNC mill and lathe through MDI and off-line programming. Extensive laboratory activities.

Course Pre-requisite(s)
MTT140 Introduction to CNC

Credit Hours
4

Total Contact Hours

Total Instructor Contact Hours:
92

Total Student Contact Hours:
92

Course Fee
50

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
Student Interview and Portfolio Review

Goals, Topics, and Objectives

Core Course Topics

1. Review of Pocket Milling
2. Review of Tool Compensation
3. Work Coordinate System
4. Sub – Routines / Sub – Programs
5. Thread Milling
6. Mirror Imaging
7. Fourth Axis Programming
8. Plane Selection
9. Introduction to CNC Lathe (CNC TURNING)
10. Tool Zero
11. Setting Tool Length Offsets
12. Setting Part Zero
13. Using Cycles
14. Rough Turning
15. Rough Boring
16. Drilling
17. Threading
18. Tool Selection
19. Soft Jaws use and application
20. Live Tools
21. Communications
22. Set –Up of PC
23. Set – Up of Controller
24. DNC
25. Tooling and Tool Selection
26. Fixturing

Demonstrate safe practices while setting up and operating CNC machines.

Apply both circular and general pocket milling cycles to a part program on a VMC.

Apply work coordinate shifts in part programming.

Setup both work and tooling, and input the data into the offset tables.

Setup and program 4th-axis work on a VMC in the application of indexing and simultaneous 4th-axis motion.

Program a VMC to thread mill by use of standard thread milling formulas.

Set cutting tools for a CNC turning center.

Set work coordinates for the CNC turning center.

Calculate and set proper feed and speeds based on cutting tool and work material.

Write rough turning cycle using the proper programming techniques.

Write a threading cycle for a turning operation for a CNC turning center.

Assessment, Requirements, and Outcomes

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for MTT 145

MTT146 - Introduction to Machine Tool Probing

Overview

Subject
Machine Tool Technology

Academic Department
Adv Manufacturing/Fabrication

School
Business, Entrepreneurshp, PD

Course Description
Covers the elementary functions and application of the electronic probe on a Vertical Machining Center. Topics include set-up and calibration of the probe and use and application of the following cycles - Bore/Boss measuring cycle, Web/Pocket measuring cycle, and internal and external cycles. Laboratory activities.

Course Pre-requisite(s)
MTT145 CNC Operations

Credit Hours
1

Total Contact Hours
Total Instructor Contact Hours:
16

Total Student Contact Hours:
16

Course Fee
50

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
Student Interview and Portfolio Review

Goals, Topics, and Objectives

Core Course Topics

1. Probes
2. Macros
3. Variable Data Tables
4. Set-up and Calibration of Table Probes
5. Length and Diameter Measuring Cycles
6. Set-up and Calibration of Spindle Probe
7. Protected Positioning
8. Single Surface Measurement
9. Use Protected Positioning and a Single Surface Measurement Cycle
10. Web/Pocket, Bore/Boss, Internal Corner, and External Corner Measuring Cycles
11. Combining Cycles
12. Tolerance Checking Using Probe

Identify a macro program.

Identify macro data table and manually input data.

Identify a macro alarm.

Describe the use of the macro edit lock.

Describe the calibration of a spindle and table probe.

Apply the tool length and diameter measuring cycles.

Apply the protected positioning cycle.

Apply X, Y, Z single-surface measuring cycles.

Apply web/pocket and core/boss measuring cycles.

Apply internal and external corner measuring cycle.

Construct passing variable macro arguments.

Evaluate the efficiency of probe measuring procedures.

Assessment, Requirements, and Outcomes

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for MTT 146

MTT147 - Basic Macro Programming for CNC

Overview

Subject
Machine Tool Technology

Academic Department
Adv Manufacturing/Fabrication

School
Business, Entrepreneurshp, PD

Course Description
Introduces macro programming as applied to CNC machine tools. Basic elements of this type of programming include defining a macro, defined variables vs. undefined variables, and the use and application of arithmetic, logical and Boolean operators. Includes both classroom and application-based activities in the CNC laboratory.

Course Pre-requisite(s)
MTT145 CNC Operations

Credit Hours
1

Total Contact Hours
Total Instructor Contact Hours:
24

Total Student Contact Hours:
24

Course Fee
50

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
Student Interview and Portfolio Review

Goals, Topics, and Objectives

Core Course Topics

1. Macros and Macro Variables
2. Macro Lock Edit
3. Variable Data Tables
4. Entering Data via a Macro Statement
5. Calling a Macro
6. Control Statements
7. Address Constant Substitution
8. Programmable Messages
9. Introduce a Programmable Message to the Above Program
10. Arithmetic, Logical, Boolean Operators
11. Programmable Timers
12. System Overrides
13. DPRNT Statements
14. Program Structure
15. Debugging a Macro
16. Enter, Test, and Debug Macro
17. Writing a Macro - Concept - Goals - Limits
18. Flowcharting Macro - Flowcharting Symbols
19. Prove Out Input Testing of Macro
20. Variable Setting and Verification
21. Macro Interrupt (non-Haas)
22. Modal Macro Calls (non-Haas)
23. Writing Macros for Other Controls

Identify a macro program and find the macro data table.

Employ a macro program using G65 or an alias.

Describe the difference among a local, common, global, and system variables.

Apply passing variable macro arguments.

Apply a control statement within a macro.

Apply arithmetic, logical, and Boolean operators.

Utilize system timers and programmable messages.

Apply the DPRNT statement.

Write and debug a macro program.

Assessment, Requirements, and Outcomes

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for MTT 147

MTT148 - Advanced CNC Probing

Overview

Subject
Machine Tool Technology

Academic Department
Adv Manufacturing/Fabrication

School
Business, Entrepreneurshp, PD

Course Description
Coursework further explores the use and application of the electronic probe on CNC machine tools. Examines how to write cycles to use the probe in such activities as vector measuring, 4th axis applications, stock allowance, and angle measurement along with work coordinate offset measurement. Also covers how to prove work on the CNC vertical machining center. Laboratory activities.

Course Pre-requisite(s)
MTT145 CNC Operations, MTT146 Introd to Machine Tool Probing, MTT147 Basic Macro Programmi for CNC

Credit Hours
1

Total Contact Hours
Total Instructor Contact Hours:
16

Total Student Contact Hours:
16

Course Fee
50

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
Student Interview and Portfolio Review

Goals, Topics, and Objectives

Core Course Topics

1. Probe mechanics, software, calibration, and outputs
2. Vector measuring cycles
3. Pitch circle diameter cycles
4. 4th axis cycles
5. Stock allowance cycles
6. Optimizing probe
7. Multiple stylus variable loading
8. SPC offset cycles
9. Feature-to-feature cycles
10. Angle measuring cycles
11. Probe output (Renishaw)
12. Probe output (DPRNT)
13. Ballbar theory, plot reading, programming

Install probe software and make the initial settings necessary for operation.

Identify the different types of calibration and their purpose.

Identify variable outputs and their storage locations.

Apply 4th axis measuring cycles.

Apply pitch circle diameter cycles.

Apply stock allowance cycles.

Apply macro for multiple stylus data loading.

Apply feature-to-feature data cycles.

Apply SPC tool offset update cycles.

Apply angle-measuring cycles.

Apply the probe output features.

Optimize a probing cycle.

Write a program to inspect multiple features on a part and output results.

Assessment, Requirements, and Outcomes

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for MTT 148

MTT150 - Statistical Process Ctrl (SPC) in Manf

Overview

Subject
Machine Tool Technology

Academic Department
Adv Manufacturing/Fabrication

School
Business, Entrepreneurshp, PD

Course Description
Covers the use of Statistical Process Control (SPC) in manufacturing to achieve optimum product quality at lowest cost. Development of statistical charts and their interpretation related to process improvement are integral parts of the course. Also covers formulas pertaining to various charts, gage R & R, Cp, and Cpk.

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
62

Total Student Contact Hours:
62

Course Fee
50

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
Student Interview and Portfolio Review

Goals, Topics, and Objectives

Core Course Topics

1. Introduction to Manufacturing Tools and Methods.
2. History of SPC
3. Implementation
4. Benefits
5. Basic Concepts
6. Variation
7. Quality Inspection versus Detection Systems
8. Internal / External Customers
9. Control Plans / Process
10. Gaging
11. Data Collection and Analysis
12. Control Charts
13. Construction of Charts
14. Process Sheets
15. Problem Solving
16. Process / Machine Capability
17. Continuous Improvement

Describe the practical use for Statistical Process Control and related tools and methods required in manufacturing processes.

Describe how to relate and apply gaging, data collection, and problem solving techniques in a manufacturing environment.

Interpret Statistical Process Control Charts in a manufacturing environment.

Evaluate the problem-solving techniques used and the tools and methods required in a manufacturing environment.

Assessment, Requirements, and Outcomes

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for MTT 150

MTT160 - Computer Assisted N/C Programming

Overview

Subject
Machine Tool Technology

Academic Department
Adv Manufacturing/Fabrication

School
Business, Entrepreneurshp, PD

Course Description
An introductory course in computer-assisted part programming. The student will use CAD/CAM software (Mastercam, Catia, and UG NX) running on a personal computer (PC). Programming for both the CNC Mill and CNC Lathe will be done in this class.

Course Pre-requisite(s)
MTT140 Introduction to CNC

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
62

Total Student Contact Hours:
62

Course Fee
50

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
Student Interview and Portfolio Review

Goals, Topics, and Objectives

Core Course Topics

1. Overview
2. Screen Set-up
3. Mouse Use
4. Windows
5. Insert, Modifier, and Snap Icons
6. Insert Icon - Circle
7. Insert Icon - Arc
8. Insert Icon - Polygon
9. Insert Icon - Fillet/Chamfer
10. Insert Icon - Pattern
11. Insert Icon - Spline
12. Utility Icons
13. CAM
14. Modifier Icons for CAM
15. Tool Library

Demonstrate the application of tool boundaries and tool paths to 2D CAD drawings.

Distinguish between CAD drawings in a DXF or IGES format.

Store and retrieve CAD/CAM drawings.

Post process CAM data into machine code for both CNC Vertical Machining Centers and Turning Centers.

Assessment, Requirements, and Outcomes

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for MTT 160

MTT170 - Advanced Computer Assisted N/C Program

Overview

Subject
Machine Tool Technology

Academic Department
Adv Manufacturing/Fabrication

School
Business, Entrepreneurshp, PD

Course Description
A study in advanced methods of part programming using CAD/CAM software (Mastercam, Catia, and UG NX) on a personal computer. Emphasizes programming three-dimensional (3-D) parts. Class assignments include multiple-part programming.

Course Pre-requisite(s)
MTT160 Comp Assisted N/C Programming

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
62

Total Student Contact Hours:
62

Course Fee
50

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
Student Interview and Portfolio Review

Goals, Topics, and Objectives

Core Course Topics

1. 2D wall definitions
2. Machining 2D Wall Definitions
3. 3D CAD screen layout
4. View Ports
5. Viewing Windows
6. Surface Types
7. Part Construction
8. Surface Generation
9. Surface Editing
10. 3 & 4 Curve Surface Generation
11. Composite Surface
12. Machining
13. Projecting onto surfaces

Define 2D wall terminology.

Describe the 3D portals for viewing.

Demonstrate the application of tool boundaries and paths to a 3D CAD drawing.

Describe the different methods of surface generation.

Describe the types and methods of 3D machining.

Create, store, and retrieve 3D drawings.

Select the proper surfacing technique for part production.

Assessment, Requirements, and Outcomes

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for MTT 170

MTT275 - Advanced CNC Operations

Overview

Subject
Machine Tool Technology

Academic Department
Adv Manufacturing/Fabrication

School
Business, Entrepreneurshp, PD

Course Description
Emphasizes the total aspects of computer numerical control (CNC) as applied in manufacturing today. Covers estimating for CNC manufacturing, DNC, tool selection, cutting-tool material selection, and small-batch production.

Course Pre-requisite(s)
MTT145 CNC Operations

Credit Hours
4

Total Contact Hours

Total Instructor Contact Hours:
92

Total Student Contact Hours:
92

Course Fee
50

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Review of CNC Milling / Turning.
2. Estimating material cost for CNC production parts.
3. Estimating Tooling costs for CNC production parts.
4. Process small batch production parts.

Demonstrate the ability to work in a team environment, sharing duties and responsibilities.

Estimate part costs by using commonly practiced quoting techniques.

Analyze and determine the most efficient programming method relative to manual vs. CAD/CAM programming.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Each group will be required to submit 3 projects as assigned. All assigned projects will be accompanied by the proper documentation as presented in the requirements. Each student is required to submit a typewritten document which details the following: group activity (as a group or team), individual contribution to the team. All students will keep a time log to validate course lecture hours and lab hours. This log will be turned in at the end of the semester.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for MTT 275

MTT297 - Special Topics in Machin Tool Technology

Overview

Subject
Machine Tool Technology

Academic Department
Adv Manufacturing/Fabrication

School
Business, Entrepreneurshp, PD

Course Description
Explores selected topics as determined by the academic department and the instructor with emphasis on current machine tool technology. Specific special topics are announced together with the prerequisites each term. Student can repeat the course when different topics are offered, earning credit for each different topic. Course may be used toward fulfilling the specific degree requirements for an associate degree or certificate.

Course Pre-requisite(s)
MTT145 CNC Operations

Credit Hours
1

Total Contact Hours
Total Instructor Contact Hours:
16

Total Student Contact Hours:
16

Course Fee
50

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
Department approval

Goals, Topics, and Objectives

Core Course Topics
To be developed by the instructor for each individual offering.

To be developed by the instructor for each individual offering.

Assessment, Requirements, and Outcomes

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for MTT 297

MTT298 - Special Topic in Mach Tool Technology

Overview

Subject
Machine Tool Technology

Academic Department
Adv Manufacturing/Fabrication

School
Business, Entrepreneurshp, PD

Course Description
Explores selected topics as determined by the academic department and the instructor with emphasis on current Machine Tool Technology. Specific special topics are be announced together with the prerequisites each term. Student can repeat the course when different topics are offered, earning credit for each different topic. Course may be used toward fulfilling the specific degree requirements for an associate degree or certificate.

Course Pre-requisite(s)
MTT145 CNC Operations

Credit Hours
2

Total Contact Hours
Total Instructor Contact Hours:
32

Total Student Contact Hours:
32

Course Fee
50

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
Department approval

Goals, Topics, and Objectives

Core Course Topics
To be developed by the instructor for each individual offering

To be developed by the instructor for each individual offering.

Assessment, Requirements, and Outcomes

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for MTT 298

MUS107 - Chorus 1

Overview

Subject
Music

Academic Department
Fine & Performing Arts

School
Liberal Arts

Course Description
First of four semesters of Concert Choir including preparation and performance of a broad spectrum of choral music from classical to popular, show tunes, and jazz. At least two performances are scheduled each semester, sometimes accompanied by band or orchestra. These courses are open to college students and adult members of the community. New singers may audition before or during the first week of class. No preparation is necessary, but the demonstration of the ability to sing in tune and hold a part (soprano, alto, tenor, or bass) is required.

Course Pre-requisite(s)
AuditionEligible to take ENG courses at HFC.

Credit Hours
1

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
15

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Skilled Demonstration, Interview

Credit for Prior College Level Learning (CPCLL) Details
Skilled Demonstration Details

Musical audition

Other Details

Determined by department

Goals, Topics, and Objectives

Course Goals
The goal of this course is to challenge musicians to develop individual and ensemble performance skills in vocal music and to perform in concert on campus and/or in the community.

Core Course Topics
1. Vocal Warmup
2. Rehearsals
3. Sight-reading
4. Musical voice (personal tone)
5. Performances

Demonstrate a vocal warmup routine, including stretching, breathing, vocalizing, and conducting exercises at an introduction level.

Perform their appropriate vocal part (soprano, alto, tenor, or bass), on representative choral literature, in sectional, full chorus, and mixed standing arrangement rehearsals at an introduction level.

Demonstrate introduction level in sight-reading skills.

Demonstrate introduction level in the understanding of the dynamic contrast in development of one's musical "voice" or musical tone.

Perform in a variety of live music events, including informal sing-alongs, on-campus programs, off-campus programs, and formal concerts, at an introduction level.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
- Class Participation
- Performance, individually and in groups

Texts
Choral repertoire will be determined by the instructor.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for MUS 107

MUS108 - Chorus 2

Overview

Subject
Music

Academic Department
Fine & Performing Arts

School
Liberal Arts

Course Description
Second of four semesters of Concert Choir including preparation and performance of a broad spectrum of choral music from classical to popular, show tunes, and jazz. At least two performances are scheduled each semester, sometimes accompanied by band or orchestra. These courses are open to college students and adult members of the community.

Course Pre-requisite(s)
MUS107 Chorus 1 or Audition

Credit Hours
1

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
15

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Skilled Demonstration, Interview

Credit for Prior College Level Learning (CPCLL) Details
Skilled Demonstration Details

Musical Audition

Other Details

Determined by department

Goals, Topics, and Objectives

Course Goals
The goal of this course is to challenge musicians to develop individual and ensemble performance skills in vocal music and to perform in concert on campus and/or in the community.

Core Course Topics
1. Vocal Warmup
2. Rehearsals
3. Sight-reading
4. Musical voice (personal tone)
5. Performances

Demonstrate a vocal warmup routine, including stretching, breathing, vocalizing, and conducting exercises at an introduction to reinforcement level.

Perform their appropriate vocal part (soprano, alto, tenor, or bass), on representative choral literature, in sectional, full chorus, and mixed standing arrangement rehearsals at an introduction to reinforcement level.

Demonstrate introduction to reinforcement level in sight-reading skills.

Demonstrate introduction to reinforcement level in the understanding of the dynamic contrast in development of one's musical "voice" or musical tone.

Perform in a variety of live music events, including informal sing-alongs, on-campus programs, off-campus programs, and formal concerts, at an introduction to reinforcement level.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
- Class Participation
- Performance, individually and in groups

Texts
Choral repertoire will be determined by the instructor.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for MUS 108

MUS109 - Symphony Band 1

Overview

Subject
Music

Academic Department
Fine & Performing Arts

School
Liberal Arts

Course Description
First of four semesters of wind ensemble (symphony band) including preparation and performance of standard concert band music and transcriptions of all styles. This group performs for college as well as community functions. These courses are open to college students, adult members of the community, and advanced placement high school students. Woodwind, brass, and percussion instrumentalists should contact the director for auditions prior to the first rehearsal.

Course Pre-requisite(s)
AuditionEligible to take ENG courses at HFC.

Credit Hours
1

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
15

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Skilled Demonstration, Interview

Credit for Prior College Level Learning (CPCLL) Details
Skilled Demonstration Details

Musical Audition

Other Details

Determined by department

Goals, Topics, and Objectives

Course Goals
The purpose of the course shall be to allow college musicians to rehearse and perform together with challenging technical levels that will allow individual growth for each student. The final important purpose is to encourage student members to perform regularly on campus and in the community.

Core Course Topics
1. Regular warm-up
2. Concentrated rehearsals
3. Sight-Reading
4. Musical voice (personal tone)
5. Performances

Practice warming up using breathing, range, balance, and blend exercises.

Demonstrate introduction level of discriminating listening habits, with emphasis on introduction level of interpretation of symphonic band literature.

Demonstrate introduction level in sight-reading skills.

Demonstrate introduction level in the understanding of the dynamic contrast in development of one's musical "voice" or musical tone.

Perform at introduction level in end-of-semester performance as scheduled (HFC Symphony Band Concert, etc.).

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
- Class Participation
- Evaluation of public performance
- Student self appraisals

Texts
Repertoire to be determined by instructor.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for MUS 109

MUS110 - Symphony Band 2

Overview

Subject
Music

Academic Department
Fine & Performing Arts

School
Liberal Arts

Course Description
Second of four semesters of wind ensemble (symphony band) including preparation and performance of standard concert band music and transcriptions of all styles. This group performs for college as well as community functions. These courses are open to college students, adult members of the community, and advanced placement high school students who play woodwind, brass, and percussion instruments.

Course Pre-requisite(s)
MUS109 Symphony Band 1 or Audition

Credit Hours
1

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
15

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Skilled Demonstration, Interview

Credit for Prior College Level Learning (CPCLL) Details
Skilled Demonstration Details

Musical Audition

Other Details

Determined by department

Goals, Topics, and Objectives

Course Goals
The purpose of the course shall be to allow college musicians to rehearse and perform together with challenging technical levels that will allow individual growth for each student. The final important purpose is to encourage student members to perform regularly on campus and in the community.

Core Course Topics
1. Regular warm-up
2. Concentrated rehearsals
3. Sight-reading
4. Musical voice
5. Performances

Practice warming up using breathing, range, balance, and blend exercises.

Demonstrate introduction to reinforcement level listening habits, with emphasis on introduction to reinforcement level of interpretation of symphonic band literature.

Demonstrate introduction to reinforcement level in sight-reading skills.

Demonstrate introduction to reinforcement level of the dynamic contrast in development of one's musical "voice" or musical tone.

Perform at introduction to reinforcement level in end-of-semester performance as scheduled (HFC Symphony Band Concert, etc.).

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
- Class Participation
- Evaluation of public performance
- Student self appraisals

Texts
Repertoire to be determined by instructor.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for MUS 110

MUS111 - Jazz Band 1

Overview

Subject
Music

Academic Department
Fine & Performing Arts

School
Liberal Arts

Course Description
First of four semesters of jazz band, including preparation and performance of Big Band music in a variety of jazz styles from swing to contemporary. This group, which performs several concerts each semester, is open to college students and adult members of the community who play saxophone, trumpet, trombone, piano, guitar, bass, or drums. New instrumentalists should contact the director to arrange for an audition prior to the first rehearsal.

Course Pre-requisite(s)
AuditionEligible to take ENG courses at HFC.

Credit Hours
1

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
15

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Interview

Credit for Prior College Level Learning (CPCLL) Details
Determined by department

Goals, Topics, and Objectives

Course Goals
The purpose of the course shall be to allow musicians to rehearse and to perform a variety of big band compositions. In addition, students will develop an appreciation of jazz styles through performance and ensemble interpretation.

Core Course Topics
1. Regular warm-up
2. Concentrated rehearsals
3. Sight-reading
4. Musical voice (personal tone)
5. Performance

Perform an appropriate warmup on their instrument.

Demonstrate introduction level of discriminating listening habits, with emphasis on introduction level of interpretation of jazz band literature.

Demonstrate introduction level in sight-reading skills.

Demonstrate introduction level in the understanding of the dynamic contrast in development of one's musical "voice" or musical tone.

Perform at an introduction level in end-of-semester concert (e. g. HFC Jazz Concert).

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
- Class Participation
- Evaluation of public performance
- Student self appraisals

Texts
Text to be determined by instructor

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for MUS 111

MUS112 - Jazz Band 2

Overview

Subject
Music

Academic Department
Fine & Performing Arts

School
Liberal Arts

Course Description
Second of four semesters of jazz band, including preparation and performance of Big Band music in a variety of jazz styles from swing to contemporary. This group, which performs several concerts each semester, is open to college students and adult members of the community who play saxophone, trumpet, trombone, piano, guitar, bass, or drums.

Course Pre-requisite(s)
MUS111 Jazz Band 1

Credit Hours
1

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
15

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Interview

Credit for Prior College Level Learning (CPCLL) Details
Determined by department

Goals, Topics, and Objectives

Course Goals
The purpose of the course shall be to allow musicians to rehearse and to perform a variety of big band compositions. In addition, students will develop an appreciation of jazz styles through performance and ensemble interpretation.

Core Course Topics
1. Regular warm-up
2. Concentrated rehearsals
3. Sight-reading
4. Musical voice (personal tone)
5. Performance

Perform an appropriate warmup on their instrument.

Demonstrate introduction to reinforcement level of discriminating listening habits, with emphasis on introduction to reinforcement level of interpretation of jazz band literature.

Demonstrate introduction to reinforcement level in sight-reading skills.

Demonstrate introduction to reinforcement level in the understanding of the dynamic contrast in development of one's musical "voice" or musical tone.

Perform at introduction to reinforcement level in end-of-semester concert (e. g. HFC Jazz Concert).

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
- Class Participation
- Evaluation of public performance
- Student self appraisals

Texts
Text to be determined by instructor

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for MUS 112

MUS113 - Applied Music (1 Credit) 1

Overview

Subject
Music

Academic Department
Fine & Performing Arts

School
Liberal Arts

Course Description
First of four semesters of weekly half-hour private lessons intended to improve vocal or instrumental musicianship through study with a professional teacher. Students should contact the applied music director prior to or during the first week of the semester for teacher assignments. A juried performance is required at the conclusion of each semester. In addition to tuition, the student must also pay a weekly fee to the private instructor.

Credit Hours
1

Total Contact Hours
Total Instructor Contact Hours:
16

Total Student Contact Hours:
16

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
Determined by department

Goals, Topics, and Objectives

Course Goals
The purpose of the course shall be to allow students to receive credit for private music lessons taken from approved music teachers. The student will develop individual performance skills.

Core Course Topics
1. The private teacher is responsible for directing the study and performance skill development for each student.
2. Appropriate scales, exercises, techniques, and repertoire will be included as part of the study.

Perform ascending and descending major and related minor (natural, harmonic, melodic) scales (0-1 sharps/flats) and tonic arpeggio on: -vocalists: voice & piano (one octave, single line) -percussionists: any keyboard instrument (one octave, single line) -pianists: piano (two octaves, both hands in octaves) -all other instrumentalists: own instrument (one octave).

Perform 4-6 minutes of material (e.g. sonata, concerto, art song, etude, etc.,) representative of the student's development in order to demonstrate improved tone, technique, musicianship, and ease of confidence in solo performance before jury of music faculty.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Private teacher evaluation

Evaluation of Juried solo performance at conclusion of the semester

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for MUS 113

MUS114 - Applied Music (2 Credits)1

Overview

Subject
Music

Academic Department
Fine & Performing Arts

School
Liberal Arts

Course Description
First of four semesters of weekly one-hour private lessons intended to improve vocal or instrumental musicianship through study with a professional teacher. Students should contact the applied music director prior to or during the first week of the semester for teacher assignments. A juried performance is required at the conclusion of each semester. In addition to tuition, the student must also pay a weekly fee to the private instructor.

Course Pre-requisite(s)
Instructor Permission

Credit Hours
2

Total Contact Hours

Total Instructor Contact Hours:
32

Total Student Contact Hours:
32

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
Determined by department

Goals, Topics, and Objectives

Course Goals
The purpose of the course shall be to allow students to receive credit for private music lessons taken from approved music teachers. The student will develop individual performance skills.

Core Course Topics

1. The private teacher is responsible for directing the study and performance skill development for each student.
2. Appropriate scales, exercises, and techniques will be included as part of the study.

Perform ascending and descending major and related minor (natural, harmonic, melodic) scales (0-3 sharps/flats) and tonic arpeggio on:
vocalists: voice & piano (one octave, single line)
percussionists: any keyboard instrument (one octave, single line)
pianists: piano (two octaves, both hands in octaves)
all other instrumentalists: own instrument (one octave)
Perform 8-12 minutes of material (e.g., sonata, concerto, art song, etude, etc.) representative of the students' development
Demonstrate improved tone, technique, musicianship, and ease of confidence in solo performance before jury of music faculty.
Perform in public performance (e.g., HFCC Student Recital).

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Private teacher evaluation

Evaluation of Juried solo performance at the conclusion of the semester

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for MUS 114

MUS115 - Applied Music (1 Credit) 2

Overview

Subject
Music

Academic Department
Fine & Performing Arts

School
Liberal Arts

Course Description
Second of four semesters of weekly half-hour private lessons intended to improve vocal or instrumental musicianship through study with a professional teacher. Students should contact the applied music director prior to or during the first week of the semester for teacher assignments. A juried performance is required at the conclusion of each semester. In addition to tuition, the student must also pay a weekly fee to the private instructor.

Course Pre-requisite(s)
MUS113 Applied Music (1 Credit) 1 (one credit)

Credit Hours
1

Total Contact Hours

Total Instructor Contact Hours:
16

Total Student Contact Hours:
16

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
Determined by department

Goals, Topics, and Objectives

Course Goals
The purpose of the course shall be to allow students to receive credit for private music lessons taken outside the college from approved music teachers. The student will develop individual performance skills.

Core Course Topics

1. The private teacher is responsible for directing the study and performance skill development for each student.
2. Appropriate scales, exercises, techniques, and repertoire will be included as part of the study.

Perform ascending and descending major and related minor (natural, harmonic, melodic) scales (2-3 sharps/flats) and tonic arpeggio on:
vocalists: voice & piano (one octave, single line)
percussionists: any keyboard instrument (one octave, single line)
pianists: piano (two octaves, both hands in octaves)
all other instrumentalists: own instrument (one octave)
Perform 4-6 minutes of material (e.g., sonata, concerto, art song, etude, etc.) representative of the students' development
Demonstrate improved tone, technique, musicianship, and ease of confidence in solo performance before jury of music faculty.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Private teacher evaluation

Evaluation of Juried solo performance at the conclusion of the semester

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for MUS 115

MUS116 - Applied Music (2 Credits) 2

Overview

Subject
Music

Academic Department
Fine & Performing Arts

School
Liberal Arts

Course Description
Second of four semesters of weekly one-hour private lessons intended to improve vocal or instrumental musicianship through study with a professional teacher. Students should contact the applied music director prior to or during the first week of the semester for teacher assignments. A juried performance is required at the conclusion of each semester. In addition to tuition, the student must also pay a weekly fee to the private instructor.

Course Pre-requisite(s)
MUS114 Applied Music (2 Credits)1 Applied Music (two credits) 1

Credit Hours
2

Total Contact Hours
Total Instructor Contact Hours:
32

Total Student Contact Hours:
32

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
Determined by department

Goals, Topics, and Objectives

Course Goals
The purpose of the course shall be to allow students to receive credit for private music lessons taken from approved music teachers. The student will develop individual performance skills.

Core Course Topics
1. The private teacher is responsible for directing the study and performance skill development for each student.
2. Appropriate scales, exercises, and techniques will be included as part of the study.

Perform ascending and descending major and related minor (natural, harmonic, melodic) scales (4-7 sharps/flats) and tonic arpeggio on:
vocalists: voice & piano (one octave, single line)
percussionists: any keyboard instrument (one octave, single line)
pianists: piano (two octaves, both hands in octaves)
all other instrumentalists: own instrument (one octave)
Perform 8-12 minutes of material (e.g., sonata, concerto, art song, etude, etc.) representative of the students' development
Demonstrate improved tone, technique, musicianship, and ease of confidence in solo performance before jury of music faculty.
Perform in public performance (e.g., HFCC Student Recital).

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Private teacher evaluation

Evaluation of Juried solo performance at the conclusion of the semester

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for MUS 116

MUS117 - Piano Class 1

Overview

Subject
Music

Academic Department
Fine & Performing Arts

School
Liberal Arts

Course Description
A beginning-level piano class where students learn to read and play piano music. Instruction takes place in the HFC Music Technology Lab.

Credit Hours
2

Total Contact Hours
Total Instructor Contact Hours:
32

Total Student Contact Hours:
32

Course Fee
15

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
Determined by department

Goals, Topics, and Objectives

Course Goals
Piano class is open to any student and is especially intended for those who wish to become vocal or instrumental music teachers, or elementary classroom teachers, and have had little or no keyboard experience. In addition to basic technique, the emphasis is on hand-eye coordination. Ample practice facilities are available in the Music Wing of the MacKenzie Fine Arts Center.

Core Course Topics
1. Technical five-finger exercises
2. Note reading
3. Scales
4. Melodies with accompaniment

Perform the ascending and descending C major scale, hands together, one octave
Identify and play notes, with and without accidentals, of the treble and bass staves
Perform representative technical etude (e.g. Hanon)
Demonstrate proper posture and hand/finger position at the piano keyboard
Perform representative solo piano piece, from memory
Perform simple arrangement of "Happy Birthday" in F major, from memory

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
- Class Participation
- Individual Performance

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for MUS 117

MUS118 - Piano Class 2

Overview

Subject
Music

Academic Department
Fine & Performing Arts

School
Liberal Arts

Course Description
This course builds upon skills developed in MUS 117 (Piano Class 1). Instruction takes place in the HFC Music Technology Lab.

Course Pre-requisite(s)
MUS117 Piano Class 1 or Instructor Permission

Credit Hours
2

Total Contact Hours

Total Instructor Contact Hours:
32

Total Student Contact Hours:
32

Course Fee
15

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
Determined by department

Goals, Topics, and Objectives

Course Goals
This course builds upon skills developed in Piano 1; continuation of daily exercises and gradual progression to intermediate repertoire will be accomplished.

Core Course Topics

1. Technical five-finger exercises
2. Note reading
3. Scales
4. Melodies with accompaniment

Perform the ascending and descending major scales in F major and G major, hands together, one octave

Perform I, IV, and V chords in C major, F major, and G major, hands separate

Perform ascending and descending chromatic scale, one octave from C to C, hands separate, naming notes

Perform representative technical etude (e.g. Hanon)

Perform representative solo piano piece, from memory

Perform intermediate arrangement of "Happy Birthday" in F major, from memory

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement

- Class Participation
- Individual performance

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for MUS 118

MUS121 - Jazz Improvisation 1

Overview

Subject
Music

Academic Department
Fine & Performing Arts

School
Liberal Arts

Course Description
First of four semesters of jazz improvisation in which skills are developed through the study of jazz theory and the performances of a variety of jazz styles in a small group, jazz combo setting.

Course Pre-requisite(s)
Read Music

Credit Hours
2

Total Contact Hours

Total Instructor Contact Hours:
32

Total Student Contact Hours:
32

Course Fee
10

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
Determined by department

Goals, Topics, and Objectives

Course Goals
This course is intended to develop individual and ensemble skills necessary for successful performing in small group performances of jazz music.

Core Course Topics

1. Chord/melody relationships
2. Scale patterns derived from chords

Perform ascending and descending major and related minor (harmonic) scales (0-1 sharps/flats) on:

vocalists: voice & piano (one octave, single line)

percussionists: any keyboard instrument (one octave, single line)

pianists: piano (two octaves, both hands in octaves)

all other instrumentalists: own instrument (one octave)

Perform iim7-V7-Imaj7 arpeggios in same keys as #1 above

Perform ascending and descending blues scales in same keys as #1 above

Improvise utilizing major/minor scales over iim7-V7-Imaj7 chord progressions and blues scales over blues progressions

Perform melodies to standard songs in various jazz styles

Demonstrate improved tone, technique, musicianship, and ease of confidence in public jazz performance

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement

- Class Participation
- Performance, individually and in groups

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for MUS 121

MUS122 - Jazz Improvisation 2

Overview

Subject
Music

Academic Department
Fine & Performing Arts

School
Liberal Arts

Course Description
Second of four semesters of jazz improvisation in which skills are developed through the study of jazz theory and the performances of a variety of jazz styles in a small group, jazz combo setting.

Course Pre-requisite(s)
MUS121 Jazz Improvisation 1

Credit Hours
2

Total Contact Hours

Total Instructor Contact Hours:
32

Total Student Contact Hours:
32

Course Fee
10

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
Determined by department

Goals, Topics, and Objectives

Course Goals
This course is intended to develop individual and ensemble skills necessary for successful performing in small group performances of jazz music.

Core Course Topics
1. Chord/melody relationships
2. Scale patterns derived from chords

Perform ascending and descending major and related minor (harmonic) scales (2-3 sharps/flats) on:
vocalists: voice & piano (one octave, single line)
percussionists: any keyboard instrument (one octave, single line)
pianists: piano (two octaves, both hands in octaves)
all other instrumentalists: own instrument (one octave)
Perform iim7-V7-Imaj7 arpeggios in same keys as #1 above
Perform ascending and descending blues scales in same keys as #1 above
Improvise utilizing major/minor scales over iim7-V7-Imaj7 chord progressions and blues scales over blues progressions
Perform melodies to standard songs in various jazz styles
Demonstrate improved tone, technique, musicianship, and ease of confidence in public jazz performance

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
- Class Participation
- Performance, individually and in groups

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for MUS 122

MUS123 - Voice Techniques 1

Overview

Subject
Music

Academic Department
Fine & Performing Arts

School
Liberal Arts

Course Description
This course covers basic singing techniques including breath control, diction, posture, and tone quality; instruction takes place in a classroom setting. Techniques are applied to a variety of songs. This course is for singers of all ages and interests.

Credit Hours
2

Total Contact Hours

Total Instructor Contact Hours:
32

Total Student Contact Hours:
32

Course Fee
10

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
Determined by department

Goals, Topics, and Objectives

Course Goals
This course includes the development of singing skills. The class voice approach will challenge the individual student to develop his/her singing ability to its highest level.

Core Course Topics
1. Regular warm up
2. Effective interpretation, stage presence, self-confidence
3. Performances

Demonstrate good singing posture
Demonstrate a proper warm up procedure, involving stretching, breathing, and vocalizing techniques
Sing "The Star Spangled Banner " accurately, from memory
Sing one Italian art song accurately, from memory
Sing one popular song accurately, from memory
Demonstrate good breath control, diction, tone quality, and ease of confidence in solo performance before classmates

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
- Class Participation
- Performance, individually and in groups

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for MUS 123

MUS126 - Recording Studio Engineering 1

Overview

Subject
Music

Academic Department
Fine & Performing Arts

School
Liberal Arts

Course Description
This course provides hands-on experience in digital audio engineering. Students will learn to engineer recording sessions by working in an actual recording studio with live musicians. The course covers basic techniques in setting up recording sessions, preparing computer files, microphone usage and placement, digitizing principals, audio acquisition options, midi integration and session management.

Course Pre-requisite(s)
ENG-093 eligible

Course Co-requisite(s)
MUS127 Audio Mastering 1

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
40

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Departmental Exam, Skilled Demonstration, Other

Credit for Prior College Level Learning (CPCLL) Details
The exam will be a course final exam or a revised final exam from a recent semester as administered by the presiding faculty member.

Skilled Demonstration Details

The student will be given scenarios that represent course objectives covered during the semester and be asked to demonstrate the correct methods of addressing the tasks and problems in the scenario using the equipment, computer and software in the studio.

Other Details

Determined by department

Goals, Topics, and Objectives

Core Course Topics

1. Mics & techniques
2. Pre-amps, EQ's & Compression
3. Electronic Music and the digital environment
4. Digital recording software
5. Pre-production
6. Tracking
7. The sessions

Identify various types of microphones and demonstrate the appropriate application and placement of each.

Identify and describe different grades of pre-amps, equalizers, and compression software and devices.

Use appropriate pre-amps, equalizers, and compression software and devices, given a specific recording applications.

List and identify the use of each component of a state-of-the-art recording environment.

Create a comprehensive recording session using professional level software such as ProTools.*

Identify the pre-production needs for a simple recording session.*

Create appropriate tracks and equipment patching that anticipate post-production concerns, given a simple recording session scenario.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
When appropriate, objectives will be assessed using small projects consisting of actual musicians in a recording session.

Theoretical knowledge will be assessed using short quizzes.

The final assessment of the course will be a major project consisting of recording a simple pop group in an actual recording studio. The student will be responsible for all aspects of the recording session including equipment set up and care, computer software set up, the recording session itself, and clean up.

General Course Requirements and Recommendations
Strong computer skills and a fundamental understanding of music theory is recommended.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for MUS 126

MUS127 - Audio Mastering 1

Overview

Subject
Music

Academic Department
Fine & Performing Arts

School
Liberal Arts

Course Description
Provides hands-on experience and guided practice in digital audio mixing and mastering. Explains how to prepare complex digital audio files for duplication and audio for mixing. Also covers basic techniques in mixing room acoustics, software plug-ins, how to troubleshoot various audio problems, equalization, stereo imagery, noise limitation, and bit conversion. Uses professional audio production software.

Course Pre-requisite(s)
ENG-093 eligible

Course Co-requisite(s)
MUS126 Recording Studio Engineering 1

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
40

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
Determined by department

Goals, Topics, and Objectives

Core Course Topics

1. The mixing/mastering environment
2. Trouble shooting problems in audio files
3. Learning how to shape the music
4. Stereo imagery
5. Mastering

List and describe acoustical considerations associated with a mixing/ mastering environment.

Prepare a given digital audio file for mixing by cleaning the tracks, moving parts as appropriate, normalizing levels.

Identify and trouble shoot problems with a given digital audio file by using plug-ins, applying affects, and creating presets.

Shape the sound of a given digital audio file by defining the frequencies of the mix, identifying EQ's for various instruments, and using pre-recorded reference material.

Create the stereo imagery associated with industry standard music with a given digital audio file.

Create width and depth in the mix of a given digital audio file by mastering noise, mastering EQ, limiting and bit converting.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
When appropriate, objectives will be assessed using small projects consistent with the course objectives.

Students will be observed and evaluated on their ability to work on projects and solve problems common to audio file preparation.

Theoretical knowledge will be assessed using short quizzes.

The final assessment of the course will be a major project consisting of the complete preparation, mixing and mastering of a digital audio file consisting of multiple tracks containing instruments and vocals typical of a pop music recording session.

General Course Requirements and Recommendations
Strong computer skills and a fundamental understanding of music theory is recommended.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for MUS 127

MUS128 - Musical Production 1

Overview

Subject
Music

Academic Department
Fine & Performing Arts

School
Liberal Arts

Course Description
This course combines the study of musical skills and techniques involved in a staged musical production with performance activity in a major production and/or the classroom.

Course Pre-requisite(s)
Audition

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
94

Total Student Contact Hours:
94

Course Fee
10

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
Determined by department

Goals, Topics, and Objectives

Course Goals
The dominant focus of attention of musical production will be on live performances by the class members in a musical production open to the public.
Core Course Topics

1. Basic orientation including:
    - Casting your show
    - Rehearsal schedule
    - Acting in a musical production
    - Creative costuming
    - Lighting
    - Make-up
    - Creative blocking
    - Set design
    - Choreography
    - Curtain calls
    - Recording techniques
    - Sound systems:
        - Microphones
        - Mixers
        - Amplifiers
        - Speakers
        - Cables
2. Implementation of skills and techniques
    - In a major musical production and/or in a solo selection and participation in one ensemble within the class.

Perform all chorus selections of the current musical theatre production.
Perform all solo/ensemble selections assigned.
Produce a variety of vocal tones for delivery of lines and songs.
*Perform in synchronization with other musicians, with and without a conductor.
Demonstrate ability to coordinate stage direction movement ("blocking") with singing and delivering lines.
Demonstrate make-up technique and costume preparation appropriate to role.
Demonstrate appropriate stage presence during public performances.
Demonstrate ability to stay in character during public performances.
Demonstrate improved tone, technique, musicianship, and ease of confidence in public performances.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement

- Class Participation
- Performance, individually and in groups
- Evaluation of public performances

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for MUS 128

MUS130 - Music Appreciation

Overview

Subject
Music

Academic Department
Fine & Performing Arts

School
Liberal Arts

Course Description
Introduces the basic elements and organizational forms of music, and emphasizes listening skills, music vocabulary, and being open-minded toward all types of music.

Course Pre-requisite(s)
Eligible to take ENG courses at HFC.

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
10

Academic Level
Undergraduate

General Education Category
Humanities and Fine Arts

Michigan Transfer Agreement (MTA) Category
Category 5: Humanities and Fine Arts - Applied Degrees, Category 5: Humanities and Fine Arts - Transfer Degrees

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Interview

Credit for Prior College Level Learning (CPCLL) Details
Determined by department

Goals, Topics, and Objectives

Course Goals
The goal of this course is to provide liberal arts and technical students an opportunity to develop an open-mindedness toward all music. General music listening experience using specific music vocabulary will be introduced.
Core Course Topics

1. Elements of music
2. Organization of music
3. Chronology of Western Civilization Music
4. Genre and Style

Identify the elements used in a musical composition including pitch, time, timbre and instrumentation.
Identify the structure of a musical composition, including simple to complex forms, composite forms, and free and miscellaneous forms.
Identify the general conventions of periods in Western music history, including Early, Renaissance, Baroque, Classical, Romantic, Modern, Contemporary-Jazz, Pop, and Rock & Roll, and identify major composers from each of these periods.
Identify the defining elements of a musical genre or style, including musical content, as well as lyrical considerations and political or personal subtexts.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement

- Homework Assignments
- Written quizzes, tests
- Listening quizzes, tests
- Written concert reviews

Texts
To be determined by instructor.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for MUS 130

MUS132 - Music Literature

Overview

Subject
Music

Academic Department
Fine & Performing Arts

School
Liberal Arts

Course Description
This class explores the development of listening skills and traces the musical trends of different time periods of Western Music History. With a deep look at music through the lens of symphonic and chamber music, students can expect open discussions on the definition of art and a challenge to preconceived notions of what music is and how it can be experienced.

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
10

Academic Level
Undergraduate

General Education Category
Humanities and Fine Arts

Michigan Transfer Agreement (MTA) Category
Category 5: Humanities and Fine Arts - Applied Degrees, Category 5: Humanities and Fine Arts - Transfer Degrees

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
Determined by department

Goals, Topics, and Objectives

Course Goals
Students will learn to listen to and identify different styles, idiosyncrasies, and philosophies of composers and time periods, with emphasis on form, timbre, and creative trends.

Core Course Topics
1. Early music
2. The Common Practice Era (Baroque, Classic, and Romantic)
3. Nationalism in Music
4. Impressionism vs Expressionism
5. Serialism vs Minimalism
6. Experimentalism vs Populism
7. Current Trends in Contemporary Classical Music
8. Defining Music

Identify the sound of early notated music from Medieval through the Renaissance

Identify commonalities between the three periods of the Common Practice Era. Distinguish the differences in form, instrumentation, and style that separate these three periods.

Identify the sound of certain Nationalistic elements in mid-to-late Romantic music.

Articulate the elements of French Impressionism, both in art and music. Identify Impressionist pieces, especially in contrast to the antithetical style of Expressionism.

Determine the defining characteristics of modernist music of the 20th century, through comparison of contrasting styles--like serialism and other dissonant atonality against the hyper-tonal minimalist movement.

Understand the reactionary and diverse nature of 20th century music through comparison of extremes.

Understand the current trends in 21st century classical music, including neo-tonality, eclecticism, multi-media, and other trends, including recent and current pieces by notable living composers.

Identify and challenge the defining criteria of music.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
- Listening Exams
- Concert Attendance

Texts
Streaming playlists and printed music excerpts determined on a semester by semester basis

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for MUS 132

MUS133 - Exploring Popular Music

Overview

Subject
Music

Academic Department
Fine & Performing Arts

School
Liberal Arts

Course Description
This class explores the history of popular music from the 1950's through today, with emphasis on the relationship between music and sociopolitical issues.

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
10

Academic Level
Undergraduate

General Education Category
Humanities and Fine Arts

Michigan Transfer Agreement (MTA) Category
Category 5: Humanities and Fine Arts - Applied Degrees, Category 5: Humanities and Fine Arts - Transfer Degrees

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
Determined by department

Goals, Topics, and Objectives

Course Goals
The goal of this course is to introduce popular music and its impact socially, culturally, economically, and politically since 1950.

Core Course Topics
1. The roots of Rock: overview of the Fifties' style.
2. Transition: The early 1960's.
3. The British Invasion.
4. Folk Rock, Soul, and Motown.
5. The 1970's, 80's, and early 90's (Acid Rock, Punk Rock, Disco, MTV, Rap).
6. The musicians.
7. The industry.
8. The audience.
9. Society in general.

Identify basic musical concepts found in various pop and rock styles.

Identify the popular music basic facts and dates (significant events, influential figures, milestone songs, albums, concerts, sociological factors affecting pop music).

Describe factors affecting artistic thought and development.

Describe factors affecting consumers of popular music.

Show how situations in a given time period anticipate events in subsequent periods.

Develop a continuum of thought that ties popular music development together in a logical sequence.

Analyze the reasoning used by key players in the music industry and identify the premises and assumptions used in that reasoning.*

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
- Textbook reading assignments
- Audio and video presentations
- Music listening tests
- Tests on readings and lectures

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for MUS 133

MUS134 - Music Fundamentals

Overview

Subject
Music

Academic Department
Fine & Performing Arts

School
Liberal Arts

Course Description
This course explains how to read music, including notes, clefs, rhythms, time signatures, scales, intervals, and basic chords. This course is recommended for the student who has a minimal background in music.

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
10

Academic Level
Undergraduate

General Education Category
Humanities and Fine Arts

Michigan Transfer Agreement (MTA) Category
Category 5: Humanities and Fine Arts - Applied Degrees, Category 5: Humanities and Fine Arts - Transfer Degrees

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
Determined by department

Goals, Topics, and Objectives

Course Goals
The goal of this course is to introduce the fundamentals of music notation, structure and symbols and assist students who are not fully prepared to absorb the full thrust of music theory courses.

Core Course Topics
1. Pitch notation reading
2. Rhythm notation reading
3. Rhythm reading (performance)
4. Intervals
5. Scales
6. Triads
7. Keyboard fundamentals

Identify and write notes on treble and bass staves.

Identify and write all accidentals, including flat, sharp, double flat, double sharp, and natural symbols.

Identity and write the most common time signatures (2/4, 3/4, 4/4, 6/8, 9/8, 12/8).

Perform beat and division of beat in the time classifications represented by the time signatures above.

Construct and identify (utilizing Roman Numerals) triads in major keys.

Perform major scales in one or more keys at a keyboard.

Perform major scale vocally utilizing solfeggio.

Perform "Happy Birthday" in F major three times, playing melody on the piano all three times while singing: note names, solfeggio and lyrics.

Construct and identify (utilizing Roman Numerals) triads in major keys showing the ability to identify the abstract patterns and apply them in different keys.*

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
- Homework assignments
- Written and oral quizzes, tests

Texts
Basic Materials in Music Theory, by Harder, P. & Steinke, G., Chapters 1-5, portions of Chapters 8, 10, and 11

Allyn and Bacon/Longman Publishers

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for MUS 134

MUS138 - Music Theory 1

Overview

Subject
Music

Academic Department
Fine & Performing Arts

School
Liberal Arts

Course Description
This course is intended for music majors as the first class in the music theory sequence. Students should be able to read music and have a basic understanding of key signatures and time signatures.

Course Pre-requisite(s)
Read Music

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
10

Academic Level
Undergraduate

General Education Category
Humanities and Fine Arts

Michigan Transfer Agreement (MTA) Category
Category 5: Humanities and Fine Arts - Applied Degrees, Category 5: Humanities and Fine Arts - Transfer Degrees

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
Determined by department

Goals, Topics, and Objectives

Core Course Topics
1. The review of rudiments. Exercises in note writing, clefs, stems, rhythmic values, major and minor scales, proper writing of key signatures, and identification of modes
2. Study of major, minor, perfect augmented, and diminished intervals
3. Chord spelling
4. Chords derived from major and minor scales
5. Analysis of all above factors in music the student is currently performing

Compose rhythms in basic time signatures

Identify the melodic and harmonic elements within major and minor keys

Construct major and minor scales

Construct triads and determine their quality

Construct major, minor, perfect, diminished, and augmented intervals

Identify melodic and harmonic elements in music the student is currently performing*

Correlate all written theory with the co-requisite Aural Music Skills 1 (MUS 141) course

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
- Homework assignments
- Written quizzes, tests
- Basic Compositions

Texts
Basic Materials in Music Theory, by Harder, P. & Steinke, G., Chapters 1-11

Allyn and Bacon/Longman Publishers

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for MUS 138

MUS139 - Music Theory 2

Overview

Subject
Music

Academic Department
Fine & Performing Arts

School
Liberal Arts

Course Description
Covers triads in inversion, phrase and cadences, harmonic progressions, and four-part harmonization including voice leading. Recommended to be taken in conjunction with MUS 142, Aural Music Skills 2.

Course Pre-requisite(s)
MUS138 Music Theory 1

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
10

Academic Level
Undergraduate

General Education Category
Humanities and Fine Arts

Michigan Transfer Agreement (MTA) Category
Category 5: Humanities and Fine Arts - Applied Degrees, Category 5: Humanities and Fine Arts - Transfer Degrees

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
Determined by department

Goals, Topics, and Objectives

Course Goals
This second semester level of music theory adds to the theoretical knowledge and raises the level of musicianship. The goal of this course is to enable students to handle more complex materials, including the analysis of triads, phrase structure, harmonic progressions, voice leading, and four part harmonization.

Core Course Topics

1. Music Theory Review (MUS138 Music Theory 1).
2. Melodic sources in major and minor keys.
3. Harmonic sources in major and minor keys.
4. Four-part voicing of chords (SATB).
5. Figured bass.
6. Cadences.

Identify the melodic and harmonic sources within the major and minor keys.

Construct major and minor scales.

Construct appropriate chords and their quality.

Voice chords in SATB according to a given figured bass.

Identify and construct cadences in a given context.

Correlate all written theory with the co-requisite Aural Music Skills 2 (MUS 142) course.*

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement

- Homework assignments
- Written quizzes, tests

Texts
Harmonic Materials in Tonal Music, Part 1, by Harder, P. & Steinke, G., Chapters 1-7

Allyn and Bacon/Longman Publishers

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for MUS 139

MUS141 - Aural Music Skills 1

Overview

Subject
Music

Academic Department
Fine & Performing Arts

School
Liberal Arts

Course Description
This course teaches singing and the transcribing of simple melodies, as well as fundamental conducting techniques for the development of rhythmic skills. This course is recommended for all instrumental and vocal musicians.

Course Pre-requisite(s)
Read Music

Credit Hours
2

Total Contact Hours

Total Instructor Contact Hours:
32

Total Student Contact Hours:
32

Course Fee
10

Academic Level
Undergraduate

General Education Category
Humanities and Fine Arts

Michigan Transfer Agreement (MTA) Category
Category 5: Humanities and Fine Arts - Applied Degrees, Category 5: Humanities and Fine Arts - Transfer Degrees

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
Determined by department

Goals, Topics, and Objectives

Course Goals
The purpose of this course is to develop individual musicianship and therefore promote musicianship as a worthy objective, and to allow the student to realize an honest musical self-appraisal and then an intelligent determination to continue his or her involvement with music on a vocational or avocational basis.

Core Course Topics

1. Basic orientation including:

   Lines and spaces, Key signatures, Notes: names and values, Time signatures, Solfeggio names and applications
2. Implementing sight reading to include:

   Classroom reading as a whole, Individual solo and ensemble participation, Regular practice habits to accelerate success
3. Material to include:

   A range of melodies: simple to complex, Major Scales, Minor Scales: natural, harmonic, and melodic, All intervals: simple to complex, Solo, duet and small ensemble singing, Rhythmic organization: simple to complex

Perform the major and minor (natural, harmonic, and melodic) scales and tonic dominant seventh-tonic arpeggios utilizing solfeggio

Perform melodies (level 1) utilizing solfeggio, melodic numbers, rhythmic numbers, note names, and neutral syllable

Perform duets (level 1) utilizing solfeggio, rhythmic numbers, and neutral syllable

Identify time classification of recorded examples of compositions (level 1)

Transcribe simple melodies in major keys*

Conduct in duple, triple and quadruple (simple and compound) meters

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement

- Class Participation
- Singing quizzes
- Dictation Quizzes
- Computer exercises

Texts
A New Approach to Sight Singing, by Berkowitz, et al. W.W. Norton Publishers

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for MUS 141

MUS142 - Aural Music Skills 2

Overview

Subject
Music

Academic Department
Fine & Performing Arts

School
Liberal Arts

Course Description
This course is a second semester of sight singing and ear training. Students learn to sing and transcribe two-part and four-part pieces in major and minor keys. More challenging than MUS 141. This course is recommended for aspiring full-time music students.

Course Pre-requisite(s)
MUS141 Aural Music Skills 1

Credit Hours
2

Total Contact Hours

Total Instructor Contact Hours:
32

Total Student Contact Hours:
32

Course Fee
10

Academic Level
Undergraduate

General Education Category
Humanities and Fine Arts

Michigan Transfer Agreement (MTA) Category
Category 5: Humanities and Fine Arts - Applied Degrees, Category 5: Humanities and Fine Arts - Transfer Degrees

Goals, Topics, and Objectives

Course Goals
The purpose of this course is to develop individual musicianship and therefore promote musicianship as a worthy objective, and to allow the student to realize an honest musical self-appraisal and then an intelligent determination to continue his or her involvement with music on a vocational or avocational basis.

Core Course Topics

1. Basic orientation including:

   Lines and spaces, Key signatures, Notes: names and values, Time signatures, Solfeggio names and applications

2. Implementing sight reading to include:

   Classroom reading as a whole, Individual solo and ensemble participation, Regular practice habits to accelerate success

3. Material to include:

   A range of melodies: simple to complex, Major, Minor: natural, harmonic, and melodic, All intervals: simple to complex, Solo, duet, and small ensemble singing, Rhythmic organization: simple to complex

Perform all fifteen major and minor (natural, harmonic, and melodic) scales and tonic-dominant seventh-tonic arpeggios utilizing note names

Perform melodies (level 2), utilizing solfeggio, melodic numbers, rhythmic numbers, note names, and neutral syllable

Perform duets (level 2) utilizing solfeggio, rhythmic numbers, and neutral syllable

Identify time classification of recorded examples of compositions (level 2)

Transcribe intermediate melodies in major and minor keys

Conduct in duple, triple, and quadruple (simple and compound) meters, incorporating dynamic cues and entrances

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement

- Class Participation
- Singing quizzes
- Dictation Quizzes
- Computer exercises

Texts
A New Approach to Sight Singing, by Berkowitz, et al. W.W. Norton Publishers

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for MUS 142

MUS143 - Vocal Jazz Ensemble 1

Overview

Subject
Music

Academic Department
Fine & Performing Arts

School
Liberal Arts

Course Description
First of four sequential semesters of vocal jazz ensemble, covering preparation and performance of a variety of jazz and popular music in an ensemble of 8-20 voices. Group performs for various HFC and community functions. New singers may audition before or during the first week of class. No preparation is necessary, but the demonstration of the ability to sing in tune and hold a challenging part (soprano, alto, tenor, or bass) is required.

Course Pre-requisite(s)
AuditionEligible to take ENG courses at HFC.

Credit Hours
1

Total Contact Hours

Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
15

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Interview

Credit for Prior College Level Learning (CPCLL) Details
Determined by department

Goals, Topics, and Objectives

Course Goals
The purpose of this course is to challenge musicians to develop individual and ensemble performance skills in vocal jazz music. The student will take part in campus and community concerts.

Core Course Topics

1. Vocal Warmup
2. Rehearsals
3. Sight-reading
4. Musical voice (personal tone)
5. Performances

Demonstrate a vocal warmup routine, including vocal jazz harmony and improvisation exercises, at an introduction level.

Perform their appropriate vocal part (soprano, alto, tenor, or bass), on representative vocal jazz literature, in sectional, full chorus, and mixed standing arrangement rehearsals, at an introduction level.

Demonstrate introduction level in sight-reading skills.

Demonstrate introduction level in the understanding of the dynamic contrast in development of one's musical "voice" or musical tone.

Perform in a variety of live music events, including informal jam sessions, on-campus programs, off-campus programs, and formal concerts, at an introduction level.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement

- Class Participation
- Performance, individually and in groups

Texts
Repertoire will be determined by the instructor.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for MUS 143

MUS144 - Vocal Jazz Ensemble 2

Overview

Subject
Music

Academic Department
Fine & Performing Arts

School
Liberal Arts

Course Description
Second of four sequential semesters of vocal jazz ensemble, covering preparation and performance of a variety of jazz and popular music in an ensemble of 8-20 voices. Group performs for various HFC and community functions.

Course Pre-requisite(s)
MUS143 Vocal Jazz Ensemble 1 or Audition

Credit Hours
1

Total Contact Hours

Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
15

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Interview

Credit for Prior College Level Learning (CPCLL) Details
Determined by department

Goals, Topics, and Objectives

Course Goals
The purpose of this course is to challenge musicians to develop individual and ensemble performance skills in vocal jazz music. The student will take part in campus and community concerts.

Core Course Topics

1. Vocal Warmup
2. Rehearsals
3. Sight-reading
4. Musical voice (personal tone)
5. Performances

Demonstrate a vocal warmup routine, including vocal jazz harmony and improvisation exercises, at an introduction to reinforcement level.

Perform their appropriate vocal part (soprano, alto, tenor, or bass), on representative vocal jazz literature, in sectional, full chorus, and mixed standing arrangement rehearsals, at an introduction to reinforcement level.

Demonstrate introduction to reinforcement level in sight-reading skills.

Demonstrate introduction to reinforcement level in the understanding of the dynamic contrast in development of one's musical "voice" or musical tone.

Perform in a variety of live music events, including informal jam sessions, on-campus programs, off-campus programs, and formal concerts, at an introduction to reinforcement level.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement

- Class Participation
- Performance, individually and in groups

Texts
Repertoire will be determined by the instructor.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for MUS 144

MUS152 - Music Notation With Finale 1

Overview

Subject
Music

Academic Department
Fine & Performing Arts

School
Liberal Arts

Course Description
This course provides basic instruction in the use of "Finale," by Coda. "Finale" is the industry standard for music software. Students will use the music technology lab to gain hands-on experience with "Finale." Topics to be covered include basic document setup, using templates, tool palettes, importing and saving files, and file playback. To register for this course, students must have a basic knowledge of how to use a computer and file playback.

Course Pre-requisite(s)
Read Music

Credit Hours
2

Total Contact Hours

Total Instructor Contact Hours:
32

Total Student Contact Hours:
32

Course Fee
25

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
Determined by department

Goals, Topics, and Objectives

Course Goals
The goal of this course is to help students/musicians who are interested in creating polished manuscripts but lack the training to do so.

Core Course Topics

1. Computer use review.
2. Document set up.
3. Creating a single melody score.
4. Creating a piano score.
5. Adding lyrics.
6. Changing musical elements and part formatting.

Enter and edit staff and group attributes utilizing Staff Tool.

Enter and edit music utilizing Simple Entry, Speedy Entry, and Speedy Entry with MIDI Keyboard Tools.

Enter expressions and titling utilizing Staff Expression and Title Tools.

Enter and edit lyrics utilizing Lyrics Tool.

Formatting parts and set up parts and scores utilizing Page Layout Tool.

Print all documents.

Set up a "Finale" document utilizing Default Document, Setup Wizard, or templates to include all the necessary parts and in a way that shows good judgement in how to meet the objective."

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Projects

Quizzes

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for MUS 152

MUS154 - Arab Music Appreciation

Overview

Subject
Music

Academic Department
Fine & Performing Arts

School
Liberal Arts

Course Description
Arab Music Appreciation is a course designed to provide basic knowledge on Arab music while allowing the student to gain a deeper understanding of the variations of Arab culture through its music.

Course Pre-requisite(s)
Eligible to take ENG courses at HFC.

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Academic Level
Undergraduate

General Education Category
Humanities and Fine Arts

Michigan Transfer Agreement (MTA) Category
Category 5: Humanities and Fine Arts - Applied Degrees, Category 5: Humanities and Fine Arts - Transfer Degrees

Goals, Topics, and Objectives

Course Goals
The goal of this course is to provide liberal arts, technical students, and community residents an opportunity to gain basic and general knowledge of Arab & Middle Eastern Music so as to allow the student to comprehend and understand a performance of Arab music. General music listening, vocabulary, and instrumentation among other items will be introduced in the course.

Core Course Topics

1. Historical Background of Arab Music
2. Historical figures in Arab music
3. Arab Musical Instruments
4. The Arab Music Ensemble
5. Arab Music Ethos
6. Improvisation Arab Music Repertoire

Identify and describe the origins of Arab music.

Identify significant historical figures in Arab music and differentiate between them and their styles.

Visually identify various types of Arab musical instruments and distinguish between the sounds each makes.

Identify and distinguish between different types of Arab music ensembles and their performance practices.

Compare and contrast Arab and western music styles.

Analyze how improvisation is used in Arab music, including the concepts of Tarab.

Identify and summarize representative Arab vocal and instrumental repertoire.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Written homework assignments, quizzes and tests; listening quizzes and tests; and written concert reviews.

Texts
To be determined by the instructor.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for MUS 154

MUS156 - Music Technology

Overview

Subject
Music

Academic Department
Fine & Performing Arts

School
Liberal Arts

Course Description
This course covers computer literacy as relevant to the contemporary musician. In addition to computer basics like file management, word processing, and spreadsheets, students will be introduced to music notation software and digital recording techniques. A focus of the class is navigating though the complex menus of music software, understanding methods of collaboration, exploring current software options, and the creation of professional looking sheet music and professional sounding recordings. This course fulfills general education and institutional outcomes for computer technology. Students are required to read music notation for this class.

Course Pre-requisite(s)
Eligible to take ENG courses at HFC.

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
30

Academic Level
Undergraduate

General Education Category
Computer Technology

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Portfolio Review, Interview

Credit for Prior College Level Learning (CPCLL) Details
Portfolio Review

Interview

Goals, Topics, and Objectives

Core Course Topics

1. Operating System Orientation
2. Networks
3. Microsoft Office and Online Options
4. Music Notation Software
5. Recording Basics
6. Basic Post-Production
7. MIDI
8. Copyrights, Security, Privacy, and Ethics

Describe the basic functions and parts of a computer including inputs, outputs, processing and storage. Explain the difference between computer hardware and software. Demonstrate how to search for and locate files. Demonstrate how to launch and close programs and applications.

Demonstrate how to log into and out of the HFC Network. Perform multiple searches using various search engines and search modifiers on the internet. Explain the uses and differences between Ethernet and WIFI for accessing the internet.

Perform basic word processing functions to prepare a document that incorporates a variety of formatting options. Prepare a spreadsheet that incorporates basic formulas and a variety of formatting options. Prepare and view a slide show using basic presentation software functions. Describe popular online alternatives to Microsoft Office.

Demonstrate how to enter notes, rehearsal marks, double barlines and other markers using music notation software. Demonstrate how to add dynamics, expressions, and articulations to a piece of music in music notation software. Demonstrate how to transpose music, and how to format a page of music so it is ready for printing. Perform various functions such as export and save as in order to share music notation files with other programs and applications.

Describe the basic functions of a Digital Audio Workstation (DAW), including the use of an audio interface, audio input levels, and basic plug-ins. Demonstrate how to add and label markers, name tracks, and organize a music project in a DAW. Perform basic edits in a DAW including moving, deleting, copying, pasting, duplicating, and looping clips. Describe different types of microphones and their uses in audio recording.

Perform a basic Mixdown of an audio project in a DAW and employ various ways of sharing files and media from one DAW to another program or application. Demonstrate how to import and export various types of files using a DAW.

Define what MIDI is and how it is being used currently in music technology. Create and edit MIDI in both music notation software and in a DAW. Perform a transfer of MIDI files between music notation software and a DAW.

Discuss basic copyright laws as they pertain to the use of music and music technology. Recognize common threats to computer security and privacy including viruses, phishing, and identity theft. Demonstrate proper ethical and legal behavior in an online environment. Examine the issues related to plagiarism, cracked software, and illegal downloads.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement

- Re-creation of Published Sheet Music
- Recording Project
- PowerPoint Presentation of Projects
- Portfolio Review
- Participation in Discussions and Collaborations

General Course Requirements and Recommendations
A basic understanding of music notation (i.e. the ability to read music) is required.

Texts
Texts to be determined by instructor

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for MUS 156

MUS157 - Applied Music (live Sound Rein & Record)

Overview

Subject
Music

Academic Department
Fine & Performing Arts

School
Liberal Arts

Course Description
Half-hour private lessons with a professional private teacher, intended to learn techniques for sound reinforcement and recording of live music performances. Students should contact the Applied Music Director prior to or during the first week of the semester for teacher assignment.

Course Pre-requisite(s)
Permission of Applied Music Director.

Credit Hours
1

Total Contact Hours

Total Instructor Contact Hours:
16

Total Student Contact Hours:
16

Academic Level
Undergraduate

Goals, Topics, and Objectives

Course Goals
The goal of this course is to prepare students to be able to operate sound reinforcement for live HFC Music ensemble concerts and make audio recordings of HFC Music ensemble concerts. Students who are successful in this course will be able to apply the learned skills in a variety of professional opportunities.

Core Course Topics

1. Sound System Equipment
2. Sound System Setup
3. Sound System Operation
4. Recording Equpment
5. Recording System Setup
6. Recording System Operation
7. Recording
8. Editing

Identify all the elements of a sound reinforcement system, including microphones, mixers, amplifiers, speakers, and a variety of cord types (including power, microphone, speaker, patch), and describe their proper functions.
Arrange sound system equipment in a proper setup for the amplification needs of vocal and/or instrumental groups for rehearsals and live concerts.
Operate a sound system to meet the performance needs of a vocal and/or instrumental groups for live concerts.
Identify all the elements of an audio recording system, including microphones, mixers, recording software and device (e. g. Avid ProTools on a laptop computer), and a variety of cord types (including power, microphone, patch), and their proper functions.
Arrange recording system equipment in a proper setup for the recording needs of vocal and/or instrumental groups for rehearsals and live concerts.
Operate a recording system to meet the audio recording needs of a vocal and/or instrumental groups for live concerts.
Create a rough mix recording of live music concerts, using appropriate mixing software (e. g. Avid ProTools).

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Private teacher evaluation of final reinforcement & recording project, e. g. operate sound reinforcement, operate audio recording and create a rough mix recording of a live music concert.

Texts
Text to be determined by instructor.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for MUS 157

MUS191 - Audio Recording Technology 1

Overview

Subject
Music

Academic Department
Fine & Performing Arts

School
Liberal Arts

Course Description
Provides hands-on experience and guided practice in digital audio engineering, digital audio mixing, and basic digital audio mastering . Explores how to engineer recording sessions by working in an actual recording studio with live musicians. Covers basic techniques in microphone usage and placement, digitizing principals, audio acquisition options, midi integration and session management. Explains how to prepare complex digital audio files for duplication and audio for mixing. Also covers basic techniques in mixing room acoustics, software plug-ins, how to troubleshoot various audio problems, equalization, stereo imagery, noise limitation, and bit conversion. Applies core skills, workflows, and concepts of recording, editing and mixing on an Avid Pro Tools system learned in MUS-192: Pro Tools 101.

Course Pre-requisite(s)
Eligible to take ENG courses at HFC.

Course Co-requisite(s)
MUS192 Pro Tools 101 MUS134 Music Fundamentals

Credit Hours
4

Total Contact Hours
Total Instructor Contact Hours:
62

Total Student Contact Hours:
62

Course Fee
30

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Interview, Other

Credit for Prior College Level Learning (CPCLL) Details
Determined by department

Goals, Topics, and Objectives

Course Goals
Designed as an introduction to the fundamentals of audio recording technology and to develop basic skills in the following areas: audio engineering, audio mixing and mastering, and basic competency in Avid Pro Tools software.

Core Course Topics

1. Analog and Digital Audio
2. The Listening Environment
3. Microphone Selection and Placement Techniques
4. Hardware and Signal Flow
5. Fundamentals of MIDI Theory
6. Multitrack Recording (MTR) E
7. diting and Mixing
8. Mixdown and Mastering
9. Audio Signal Processing
10. The Recording Engineer and Other Roles Found in the Studio

Compare and contrast analog and digital audio. Understand hard-disk recording, including sample rate and bit depth.

Identify acoustical considerations associated with the listening environment and differentiate (aurally) mono from stereo and in-phase from out-of-phase audio.

Analyze the different types of microphones and microphone patterns used in studio recording and demonstrate appropriate microphone selection and placement techniques.

Identify the use of each hardware component of a state-of-the-art recording environment, including the various functions of a mixing console and audio signal routing. Demonstrate the basic functions of recording consoles and patch bays for signal routing.

Integrate the fundamentals of MIDI theory, including basic communication protocols and hardware interfacing.

Identify the pre-production needs for a recording session and produce a recording that consists of MIDI-generated and acoustical sound sources for a multitrack audio recording.

Demonstrate the basic operation of Avid Pro Tools for editing and mixing to produce a three-dimensional mix (height, width, and depth).

Convert (mixdown) an audio project within Avid Pro Tools and perform basic mastering techniques used for audio recordings.

Categorize the differences between host-based (native) systems and DSP-accelerated systems and perform fundamental signal processing techniques including basic equalization, effects and dynamics processing.

Differentiate between the roles of the recording engineer and other possible members of a studio including: the artist, the musicians, the producer, the mixing engineer, the assistant engineer, etc.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement

- Small projects: music session, post session, and MIDI session
- Quizzes and exams
- Observation of ability to work on projects and solve problems
- Major class and/or minor individual project consisting of:

Recording, editing, mixing and mastering a basic pop song (or other mainstream genre) using live musicians in an actual recording studio.

General Course Requirements and Recommendations
Requirements:

- Basic computer skills

Recommendations:

- Fundamental understanding of music theory
- Computer capable of running the latest version of Avid Pro Tools software
- Latest version of Avid Pro Tools Software

Texts
Texts to be determined by instructor

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for MUS 191

MUS192 - Pro Tools 101

Overview

Subject
Music

Academic Department
Fine & Performing Arts

School
Liberal Arts

Course Description
Introduces the fundamental uses of the nationally recognized Avid Pro Tools software, and teaches core skills, workflows, and basic concepts of recording, editing, and mixing on an Avid Pro Tools system. Provides an outline for the audio enthusiast with relatively little Pro Tools experience. Prepares for part one of the Avid Pro Tools online exam for certification. Part two of the online exam for certification is offered in MUS-292: Pro Tools 110. Successful completion of both parts of the exam constitutes Avid Pro Tools certification.

Course Pre-requisite(s)
Eligible to take ENG courses at HFC.Instructor permission

Credit Hours
2

Total Contact Hours

Total Instructor Contact Hours:
32

Total Student Contact Hours:
32

Course Fee
25

Academic Level
Undergraduate

Goals, Topics, and Objectives

Course Goals
Introduces the fundamental skills necessary to use Avid Pro Tools software to create and work with digital audio projects, including basic recording, editing, and mixing.

Core Course Topics

1. Pro Tools Background
2. Getting started with Pro Tools
3. Pro Tools Basic Controls
4. Creating Your First Session
5. Making Your First Audio Recording
6. Importing and Working with Media
7. Making Your First MIDI Recording
8. Selecting and Navigating
9. Editing Your Media
10. Mixing and Creating a Bounce

Define the Pro Tools Digital Audio Workstation, and explain the history and evolution of Pro Tools. Summarize the basic audio characteristics, audio to digital conversion, Pro Tools system configurations, and cross-platform issues.

Develop an understanding of Pro Tools software installation, Pro Tools file structure, Pro Tools menu structure, and the main Pro Tools windows, including how to start up Pro Tools.

Identify the basic functions of the edit tools, edit modes, time scales and rulers, and MIDI control features.

Demonstrate how to create and configure a Pro Tools document, add and work with tracks, control playback, and saving, locating, and opening Pro Tools files.

Describe how to plan and prepare for recording. Demonstrate how to record, manage and organize audio.

Identify important considerations prior to importing audio and demonstrate the process of importing both.

Describe the basics of MIDI in Pro Tools. Determine how to set the base meter and tempo, how to prepare to Record MIDI, and how to use virtual instruments. Create a basic MIDI recording and demonstrate how to view MIDI data in various ways.

Describe the universe view, and the different types of selections available in Pro Tools. Demonstrate how to work with selections, adjust the session view, and add markers to your session.

Differentiate between various playback options and the edit modes. Demonstrate basic editing techniques including: moving, trimming, creating fades, and undoing your work.

Utilize basic mixer terminology when working in the Mix Window, including the use of Plug-ins, and basic automation. Create a successful bounce (stereo mixdown) to be played back on multiple devices. Explain and justify ways and reasons to back up a Pro Tools session.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement

- In-Class and Homework Assignments
- Quizzes
- Projects

Texts
Pro Tools 101: Pro Tools Fundamentals I

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for MUS 192

MUS207 - Chorus 3

Overview

Subject
Music

Academic Department
Fine & Performing Arts

School
Liberal Arts

Course Description
Third of four semesters of Concert Choir including preparation and performance of a broad spectrum of choral music from classical to popular, show tunes, and jazz. At least two performances are scheduled each semester, sometimes accompanied by band or orchestra. These courses are open to college students and adult members of the community.

Course Pre-requisite(s)
MUS108 Chorus 2 or Audition

Credit Hours
1

Total Contact Hours

Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
15

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Skilled Demonstration, Interview

Credit for Prior College Level Learning (CPCLL) Details
Skilled Demonstration Details

Musical Audition

Other Details

Determined by department

Goals, Topics, and Objectives

Course Goals
The goal of this course is to challenge musicians to develop individual and ensemble performance skills in vocal music and to perform in concert on campus and/or in the community.

Core Course Topics

1. Vocal Warmup
2. Rehearsals
3. Sight-reading
4. Musical voice (personal tone)
5. Performances

Demonstrate a vocal warmup routine, including stretching, breathing, vocalizing, and conducting exercises at a reinforcement to mastery level.

Perform their appropriate vocal part (soprano, alto, tenor, or bass), on representative choral literature, in sectional, full chorus, and mixed standing arrangement rehearsals at a reinforcement to mastery level.

Demonstrate reinforcement to mastery level in sight-reading skills.

Demonstrate reinforcement to mastery level in the understanding of the dynamic contrast in development of one's musical "voice" or musical tone.

Perform in a variety of live music events, including informal sing-alongs, on-campus programs, off-campus programs, and formal concerts, at a reinforcement to mastery level.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement

- Class Participation
- Performance, individually and in groups

Texts
Choral repertoire will be determined by the instructor.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for MUS 207

MUS208 - Chorus 4

Overview

Subject
Music

Academic Department
Fine & Performing Arts

School
Liberal Arts

Course Description
Fourth of four semesters of Concert Choir including preparation and performance of a broad spectrum of choral music from classical to popular, show tunes, and jazz. At least two performances are scheduled each semester, sometimes accompanied by band or orchestra.

Course Pre-requisite(s)
MUS207 Chorus 3 or Audition

Credit Hours
1

Total Contact Hours

Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
15

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Skilled Demonstration, Interview

Credit for Prior College Level Learning (CPCLL) Details
Skilled Demonstration Details

Musical audition

Other Details

Determined by department

Goals, Topics, and Objectives

Course Goals
The goal of this course is to challenge musicians to develop individual and ensemble performance skills in vocal music and to perform in concert on campus and/or in the community.

Core Course Topics

1. Vocal Warmup
2. Rehearsals
3. Sight-reading
4. Musical voice (personal tone)
5. Performances

Demonstrate a vocal warmup routine, including stretching, breathing, vocalizing, and conducting exercises at a mastery level.

Perform their appropriate vocal part (soprano, alto, tenor, or bass), on representative choral literature, in sectional, full chorus, and mixed standing arrangement rehearsals at a mastery level.

Demonstrate mastery level in sight-reading skills.

Demonstrate mastery level in the understanding of the dynamic contrast in development of one's musical "voice" or musical tone.

Perform in a variety of live music events, including informal sing-alongs, on-campus programs, off-campus programs, and formal concerts, at a mastery level.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement

- Class Participation
- Performance, individually and in groups

Texts
Choral repertoire will be determined by the instructor.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for MUS 208

MUS209 - Symphony Band 3

Overview

Subject
Music

Academic Department
Fine & Performing Arts

School
Liberal Arts

Course Description
Third of four semesters of wind ensemble (symphony band) including preparation and performance of standard concert band music and transcriptions of all styles. This group performs for college as well as community functions. These courses are open to college students, adult members of the community, and advanced placement high school students who play woodwind, brass, and percussion instruments.

Course Pre-requisite(s)
MUS110 Symphony Band 2 or Audition

Credit Hours
1

Total Contact Hours

Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
15

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Skilled Demonstration, Interview

Credit for Prior College Level Learning (CPCLL) Details
Determined by department

Goals, Topics, and Objectives

Course Goals
The purpose of the course shall be to allow college musicians to rehearse and perform together with challenging technical levels that will allow individual growth for each student. The final important purpose is to encourage student members to perform regularly on campus and in the community.

Core Course Topics

1. Regular warm-up
2. Concentrated rehearsals
3. Sight-reading
4. Musical voice (personal tone)
5. Performances

Practice warming up using breathing, range, balance, and blend exercises.

Demonstrate reinforcement to mastery level of discriminating listening habits, with emphasis on reinforcement to mastery level of interpretation of symphonic band literature.

Demonstrate reinforcement to mastery level in sight-reading skills.

Demonstrate reinforcement to mastery level in the understanding of the dynamic contrast in development of musical tone.

Perform at reinforcement to mastery level in end-of-semester performance as scheduled (HFC Symphony Band Concert, etc.).

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement

- Class Participation
- Evaluation of public performance
- Student self appraisals

Texts
Repertoire to be determined by instructor.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for MUS 209

MUS210 - Symphony Band 4

Overview

Subject
Music

Academic Department
Fine & Performing Arts

School
Liberal Arts

Course Description
Fourth of four semesters of wind ensemble (symphony band) including preparation and performance of standard concert band music and transcriptions of all styles. This group performs for college as well as community functions. These courses are open to college students, adult members of the community, and advanced placement high school students who play woodwind, brass, and percussion instruments.

Course Pre-requisite(s)
MUS209 Symphony Band 3 or Audition

Credit Hours
1

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
15

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Skilled Demonstration, Interview

Credit for Prior College Level Learning (CPCLL) Details
Skilled Demonstration Details

Musical Audition

Other Details

Determined by department

Goals, Topics, and Objectives

Course Goals
The purpose of the course shall be to allow college musicians to rehearse and perform together with challenging technical levels that will allow individual growth for each student. The final important purpose is to encourage student members to perform regularly on campus and in the community.

Core Course Topics
1. Regular warm-up
2. Concentrated rehearsals
3. Sight-reading
4. Musical voice (personal tone)
5. Performances

Practice warming up using breathing, range, balance, and blend exercises.

Demonstrate mastery level of discriminating listening habits, with emphasis on mastery level of interpretation of symphonic band literature.

Demonstrate mastery level in sight-reading skills.

Demonstrate mastery level in the understanding of the dynamic contrast in development of one's musical "voice" or musical tone.

Perform at mastery level in end-of-semester performance as scheduled (HFC Symphony Band Concert, etc.).

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
- Class Participation
- Evaluation of public performance
- Student self appraisals

Texts
Repertoire to be determined by instructor.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for MUS 210

MUS211 - Jazz Band 3

Overview

Subject
Music

Academic Department
Fine & Performing Arts

School
Liberal Arts

Course Description
Third of four semesters of jazz band, including preparation and performance of Big Band music in a variety of jazz styles from swing to contemporary. This group, which performs several concerts each semester, is open to college students and adult members of the community who play saxophone, trumpet, trombone, piano, guitar, bass, or drums.

Course Pre-requisite(s)
MUS112 Jazz Band 2

Credit Hours
1

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
15

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Interview

Credit for Prior College Level Learning (CPCLL) Details
Determined by department

Goals, Topics, and Objectives

Course Goals
The purpose of the course shall be to allow musicians to rehearse and to perform a variety of big band compositions. In addition, students will develop an appreciation of jazz styles through performance and ensemble interpretation.

Core Course Topics
1. Regular warm-up
2. Concentrated rehearsals
3. Sight-reading
4. Musical voice (personal tone)
5. Performance

Perform an appropriate warmup on their instrument.

Demonstrate reinforcement to mastery level of discriminating listening habits, with emphasis on reinforcement to mastery level of interpretation of jazz band literature.

Demonstrate reinforcement to mastery level in sight-reading skills.

Demonstrate reinforcement to mastery level in the understanding of the dynamic contrast in development of one's musical "voice" or musical tone.

Perform at reinforcement to mastery level in end-of-semester concert (e. g. HFC Jazz Concert).

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
- Class Participation
- Evaluation of public performance
- Student self appraisals

Texts
Text to be determined by instructor

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for MUS 211

MUS212 - Jazz Band 4

Overview

Subject
Music

Academic Department
Fine & Performing Arts

School
Liberal Arts

Course Description
Fourth of four semesters of jazz band, including preparation and performance of Big Band music in a variety of jazz styles from swing to contemporary. This group, which performs several concerts each semester, is open to college students and adult members of the community who play saxophone, trumpet, trombone, piano, guitar, bass, or drums.

Course Pre-requisite(s)
MUS211 Jazz Band 3

Credit Hours
1

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
15

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Interview

Credit for Prior College Level Learning (CPCLL) Details
Determined by department

Goals, Topics, and Objectives

Course Goals
The purpose of the course shall be to allow musicians to rehearse and to perform a variety of big band compositions. In addition, students will develop an appreciation of jazz styles through performance and ensemble interpretation.

Core Course Topics
1. Regular warm-up
2. Concentrated rehearsals
3. Sight-reading
4. Musical voice (personal tone)
5. Performance

Perform an appropriate warmup on their instrument.
Demonstrate mastery level of discriminating listening habits, with emphasis on mastery level of interpretation of jazz band literature.
Demonstrate mastery level in sight-reading skills.
Demonstrate mastery level in the understanding of the dynamic contrast in development of one's musical "voice" or musical tone.
Perform at mastery level in end-of-semester concert (e. g. HFC Jazz Concert).

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
- Class Participation
- Evaluation of public performance
- Student self appraisals

Texts
Text to be determined by instructor

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for MUS 212

MUS213 - Applied Music (one Credit) 3

Overview

Subject
Music

Academic Department
Fine & Performing Arts

School
Liberal Arts

Course Description
Four sequential semesters of weekly half-hour private lessons intended to improve vocal or instrumental musicianship through study with a professional teacher. Students should contact the applied music lead teacher during the first week of the semester for teacher assignments. A juried performance is required at the conclusion of each semester. In addition to tuition, the student must also pay a fee to the private instructor.

Course Pre-requisite(s)
MUS115 Applied Music (1 Credit) 2

Credit Hours
1

Total Contact Hours
Total Instructor Contact Hours:
16

Total Student Contact Hours:
16

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
Determined by department

Goals, Topics, and Objectives

Course Goals
The purpose of the course shall be to allow students to receive credit for private music lessons taken outside the college from approved music teachers. The student will develop individual performance skills.

Core Course Topics
1. The private teacher is responsible for directing the study and performance skill development for each student.
2. Appropriate scales, exercises, and techniques will be included as part of the study.

Perform ascending and descending major and related minor (natural, harmonic, melodic) scales (4-5 sharps/flats) and tonic arpeggio on:
vocalists: voice & piano (one octave, single line)
percussionists: any keyboard instrument (one octave, single line)
pianists: piano (two octaves, both hands in octaves)
all other instrumentalists: own instrument (one octave)
Perform 4-6 minutes of material (e.g., sonata, concerto, art song, etude, etc.) representative of the students' development
Demonstrate improved tone, technique, musicianship, and ease of confidence in solo performance before jury of music faculty.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
- Private teacher evaluation
- Evaluation of Juried solo performance at the conclusion of the semester

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for MUS 213

MUS214 - Applied Music (two Credits) 3

Overview

Subject
Music

Academic Department
Fine & Performing Arts

School
Liberal Arts

Course Description
Third of four semesters of weekly one-hour private lessons intended to improve vocal or instrumental musicianship through study with a professional teacher. Students should contact the applied music director prior to or during the first week of the semester for teacher assignments. A juried performance is required at the conclusion of each semester. In addition to tuition, the student must also pay a weekly fee to the private instructor.

Course Pre-requisite(s)
Follow course sequence

Credit Hours
2

Total Contact Hours

Total Instructor Contact Hours:
32

Total Student Contact Hours:
32

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
Determined by department

Goals, Topics, and Objectives

Course Goals
The purpose of the course shall be to allow students to receive credit for private music lessons taken from approved music teachers. The student will develop individual performance skills.

Core Course Topics

1. The private teacher is responsible for directing the study and performance skill development for each student.
2. Appropriate scales, exercises, and techniques will be included as part of the study.

Perform tonic & dominant seventh arpeggios in major and related minor (0-3 sharps/flats) on:

vocalists: voice & piano (one octave, single line)

percussionists: any keyboard instrument (one octave, single line)

pianists: piano (two octaves, both hands in octaves)

all other instrumentalists: own instrument (one octave)

Perform 8-12 minutes of material (e.g., sonata, concerto, art song, etude, etc.) representative of the students' development

Demonstrate improved tone, technique, musicianship, and ease of confidence in solo performance before jury of music faculty.

Perform in public performance (e.g., HFCC Student Recital).

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement

- Private teacher evaluation
- Evaluation of Juried solo performance at the conclusion of the semester

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for MUS 214

MUS215 - Applied Music (one Credit) 4

Overview

Subject
Music

Academic Department
Fine & Performing Arts

School
Liberal Arts

Course Description
Fourth of four semesters of weekly half-hour private lessons intended to improve vocal or instrumental musicianship through study with a professional teacher. Students should contact the applied music director prior to or during the first week of the semester to confirm teacher assignments. A juried performance is required at the conclusion of each semester. In addition to tuition, the student must also pay a weekly fee to the private instructor.

Course Pre-requisite(s)
MUS113 Applied Music (1 Credit) 1 Applied Music (one credit) 3

Credit Hours
1

Total Contact Hours

Total Instructor Contact Hours:
16

Total Student Contact Hours:
16

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
Determined by department

Goals, Topics, and Objectives

Course Goals
The purpose of the course shall be to allow students to receive credit for private music lessons taken from approved music teachers. The student will develop individual performance skills.

Core Course Topics

1. The private teacher is responsible for directing the study and performance skill development for each student.
2. Appropriate scales, exercises, and techniques will be included as part of the study.

Perform ascending and descending major and related minor (natural, harmonic, melodic) scales (6-7 sharps/flats) and tonic arpeggio on:

vocalists: voice & piano (one octave, single line)

percussionists: any keyboard instrument (one octave, single line)

pianists: piano (two octaves, both hands in octaves)

all other instrumentalists: own instrument (one octave)

Perform 4-6 minutes of material (e.g., sonata, concerto, art song, etude, etc.) representative of the students' development

Demonstrate improved tone, technique, musicianship, and ease of confidence in solo performance before jury of music faculty.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement

- Private teacher evaluation
- Evaluation of Juried solo performance at the conclusion of the semester

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for MUS 215

MUS216 - Applied Music (two Credits) 4

Overview

Subject
Music

Academic Department
Fine & Performing Arts

School
Liberal Arts

Course Description
Fourth of four semesters of weekly one-hour private lessons intended to improve vocal or instrumental musicianship through study with a professional teacher. Students should contact the applied music director prior to or during the first week of the semester for teacher assignments. A juried performance is required at the conclusion of each semester. In addition to tuition, the student must also pay a weekly fee to the private instructor.

Course Pre-requisite(s)
MUS214 Applied Music (two Credits) 3 Applied Music (two credits) 3

Credit Hours
2

Total Contact Hours
Total Instructor Contact Hours:
32

Total Student Contact Hours:
32

Academic Level
Undergraduate

Goals, Topics, and Objectives

Course Goals
The purpose of the course shall be to allow students to receive credit for private music lessons taken from approved music teachers. The student will develop individual performance skills.

Core Course Topics
1. The private teacher is responsible for directing the study and performance skill development for each student.
2. Appropriate scales, exercises, and techniques will be included as part of the study.

Perform tonic & dominant seventh arpeggios in major and related minor (4-7 sharps/flats) on:

vocalists: voice & piano (one octave, single line)

percussionists: any keyboard instrument (one octave, single line)

pianists: piano (two octaves, both hands in octaves)

all other instrumentalists: own instrument (one octave)

Perform 8-12 minutes of material (e.g., sonata, concerto, art song, etude, etc.) representative of the students' development

Demonstrate improved tone, technique, musicianship, and ease of confidence in solo performance before jury of music faculty.

Perform in public performance (e.g., HFCC Student Recital).

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
- Private teacher evaluation
- Evaluation of Juried solo performance at the conclusion of the semester

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for MUS 216

MUS221 - Jazz Improvisation 3

Overview

Subject
Music

Academic Department
Fine & Performing Arts

School
Liberal Arts

Course Description
A continuation of the study of jazz theory and the performances of a variety of jazz styles in a small group, jazz combo setting.

Course Pre-requisite(s)
MUS122 Jazz Improvisation 2

Credit Hours
2

Total Contact Hours
Total Instructor Contact Hours:
32

Total Student Contact Hours:
32

Course Fee
10

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
Determined by department

Goals, Topics, and Objectives

Course Goals
This course is intended to develop individual and ensemble skills necessary for successful performing in small group performances of jazz music.

Core Course Topics
1. Chord/melody relationships.
2. Scale patterns derived from chords.

Perform ascending and descending major and related minor (harmonic) scales (4-5 sharps/flats) on: - vocalists: voice & piano (one octave, single line) - percussionists: any keyboard instrument (one octave, single line) - pianists: piano (two octaves, both hands in octaves) - all other instrumentalists: own instrument (one octave).

Perform arpeggios in same keys as #1 above.

Perform ascending and descending blues scales in same keys as #1 above.

Improvise utilizing major/minor scales over chord progressions and blues scales over blues progressions.

Perform melodies to standard songs in various jazz styles.

Demonstrate improved tone, technique, musicianship, and ease of confidence in public jazz performance.*

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
- Class Participation
- Performance, individually and in groups

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for MUS 221

MUS222 - Jazz Improvisation 4

Overview

Subject
Music

Academic Department
Fine & Performing Arts

School
Liberal Arts

Course Description
Fourth of four semesters of jazz improvisation in which skills are developed through the study of jazz theory and the performances of a variety of jazz styles in a small group, jazz combo setting.

Course Pre-requisite(s)
MUS221 Jazz Improvisation 3

Credit Hours
2

Total Contact Hours

Total Instructor Contact Hours:
32

Total Student Contact Hours:
32

Course Fee
10

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
Determined by department

Goals, Topics, and Objectives

Course Goals
This course is intended to develop individual and ensemble skills necessary for successful performing in small group performances of jazz music.

Core Course Topics
1. Chord/melody relationships
2. Scale patterns derived from chords

Perform ascending and descending major and related minor (harmonic) scales (6-7 sharps/flats) on: - vocalists: voice & piano (one octave, single line) - percussionists: any keyboard instrument (one octave, single line) - pianists: piano (two octaves, both hands in octaves) - all other instrumentalists: own instrument (one octave).

Perform iim7-V7-Imaj7 arpeggios in same keys as #1 above.

Perform ascending and descending blues scales in same keys as #1 above.

Improvise utilizing major/minor scales over iim7-V7-Imaj7 chord progressions and blues scales over blues progressions.

Perform melodies to standard songs in various jazz styles.

Demonstrate improved tone, technique, musicianship, and ease of confidence in public jazz performance.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
- Class Participation
- Performance, individually and in groups

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for MUS 222

MUS226 - Recording Studio Engineering 2

Overview

Subject
Music

Academic Department
Fine & Performing Arts

School
Liberal Arts

Course Description
Emphasizes advanced digital recording techniques and independent problem solving in the recording process. Covers recording sessions, computer files, microphone usage and placement, digitizing principals, audio acquisition options, midi integration, and session management. Students work in an actual digital recording studio recording a wide variety of instrumental and vocal ensembles.

Course Pre-requisite(s)
MUS126 Recording Studio Engineering 1 or Instructor Permission

Course Co-requisite(s)
MUS227 Audio Mastering 2

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
15

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
Determined by department

Goals, Topics, and Objectives

Course Goals
Students completing this course will be able to work in a professional studio environment. They will have the experience, knowledge, and skills necessary to create quality recordings and to manage a recording session under a variety of conditions using the latest digital recording software and hardware.

Core Course Topics
1. Advanced microphone utilization
2. Creative use of outboard processors
3. The recording environment as a creative stimulus
4. Identifying needs unique to uncommon musical instrument combinations
5. Producing a session from start to finish

Set up a digital recording session on the computer appropriate for a given situation.

Choose and set up recording equipment appropriate for a variety of musical ensembles.

Describe and demonstrate the sonic differences achieved by combining different hardware with various spatial placements specific to a given situation.

Create new recording tactics that address the needs of a specific recording situation.

Demonstrate mastery of digital recording hardware by using the various hardware components in the digital recording system to create recordings that satisfy the musicians' needs.

Overcome the limits of the recording environment by using the various techniques and tools available in the modern digital recording studio.

Integrate mixed media, including MIDI instruments, recorded sounds, sampled sounds, live instruments, and virtual instruments, into a coherent recording environment.

Transfer audio recordings from an analog medium into the digital realm.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
- Quizzes and exams
- Written summaries
- Individual project

General Course Requirements and Recommendations
Students should have strong computer skills. A fundamental understanding of music theory is recommended.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for MUS 226

MUS227 - Audio Mastering 2

Overview

Subject
Music

Academic Department
Fine & Performing Arts

School
Liberal Arts

Course Description
This course provides hands-on experience and guided practice in advanced digital audio mixing and mastering. Students will learn to prepare complex digital audio files for duplication. The course covers advanced techniques in mixing room acoustics, preparing audio for mixing, software plug-ins, trouble shooting audio problems, equalization, stereo imagery, noise limitation, and bit conversion. Students will learn to edit sound files for a variety of applications including CDs, DVDs, TV, radio, theater, and the Internet. Students will work with professional audio production software in a working digital recording studio.

Course Pre-requisite(s)
MUS127 Audio Mastering 1

Course Co-requisite(s)
MUS226 Recording Studio Engineering 2

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
15

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
Determined by department

Goals, Topics, and Objectives

Course Goals
Students completing this course will have acquired the knowledge and skills necessary to deliver commercial quality digital recordings for a wide variety of clients. They will be able to edit, mix, and master digital audio files to the standards appropriate for a given genre.

Core Course Topics
1. Setting up a recording session using a variety of media
2. Advanced audio editing using pitch correction and timing correction.
3. Advanced processing: equalization, spatial effects, dynamics, modulation effects, and complex audio plug-ins.
4. Advanced mixing: automation, genre matching, balance, separation, clarity, and warmth.
5. Post production: creating and delivering a digital audio file for production/broadcast.

Render virtual instruments into audio files in preparation for processing and mixing.

Correct deficiencies in recorded audio using pitch correction, equalization, and compression to obtain a sound that is optimal for the mixing process.

Correct timing issues using audio quantization, splicing, and elastic audio.

Prepare the master project/session file for mixing in accordance with the guidelines published by the Producers and Engineers Wing of the Recording Academy.

Create different mixes of a single audio file that are appropriate for two or more genres as determined by comparable commercial recordings, including the use of reverb, delay, and other special effects as necessary.

Render the multi-track mix into a single file that is ready for mastering.

Create a Redbook standard CD master with commercial friendly audio levels and sound quality.

Create edits for use in TV spots and film scores.

Convert CD audio into sound files ready for digital distribution.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
- Class critiques
- Quizzes and exams
- Instructor grading and portfolio review

General Course Requirements and Recommendations
Students should have strong computer skills. A fundamental understanding of music theory is recommended.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for MUS 227

MUS228 - Musical Production 2

Overview

Subject
Music

Academic Department
Fine & Performing Arts

School
Liberal Arts

Course Description
This course combines the study of musical skills and techniques involved in a staged musical production with performance activity in a major production and/or the classroom.

Course Pre-requisite(s)
MUS128 Musical Production 1

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
94

Total Student Contact Hours:
94

Course Fee
10

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
Determined by department

Goals, Topics, and Objectives

Course Goals
The dominant focus of attention of musical production will be on live performances by the class members in a musical production open to the public.

Core Course Topics
1. Basic orientation including:
    - Casting your show
    - Rehearsal schedule
    - Acting in a musical production
    - Creative costuming
    - Lighting
    - Make-up
    - Creative blocking
    - Set design
    - Choreography
    - Curtain calls
    - Recording techniques
    - Sound systems (microphones, mixers, amplifiers, speakers, and cables)
2. Implementation of skills and techniques.

    In a major musical production and/or In a solo selection and participation in one ensemble within the class.

Perform all chorus selections of the current musical theatre production.

Perform all solo/ensemble selections assigned.

Produce a variety of vocal tones for delivery of lines and songs.

Perform in synchronization with other musicians, with and without a conductor.

Demonstrate ability to coordinate stage direction movement ("blocking") with singing and delivering lines.

Demonstrate make-up technique and costume preparation appropriate to role.

Demonstrate appropriate stage presence during public performances.

Demonstrate ability to stay in character during public performances.

Demonstrate improved tone, technique, musicianship, and ease of confidence in public performances.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
1. Class Participation
2. Individually and group performances.
3. Evaluation of public performances.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for MUS 228

MUS229 - Advanced Studies in Audio Recording

Overview

Subject
Music

Academic Department
Fine & Performing Arts

School
Liberal Arts

Course Description
This course serves as the capstone class for the Recording Arts Certificate program. It provides for special study in audio recording and is intended for students completing the Certificate program. Students choose the topic for study and design an instructional plan under the guidance and approval of the instructor. The students will complete a major project that demonstrates skills and knowledge learned in the program. The project will then be presented to the other students at the end of the semester.

Course Pre-requisite(s)
Instructor Permission

Credit Hours
2

Total Contact Hours
Total Instructor Contact Hours:
32

Total Student Contact Hours:
32

Course Fee
20

Academic Level
Undergraduate

Goals, Topics, and Objectives

Course Goals
This course will provide students in the Recording Arts Certificate program with the opportunity to explore in depth, the topics and skills related to digital audio recording based upon their interests.

Core Course Topics
1. The project will be developed by each student under the guidance and approval of the instructor. Topics must relate to the application of digital recording knowledge and skills gained through participation in the Recording Arts Certificate program.
2. Project Development
3. Skill Assessment and Proposal Development
4. Problem Solving
5. Project Evaluation
6. Demonstration and Presentation

Identify and describe a project specific to their interest in the recording field that includes a minimum of three skill sets learned in the Recording Arts Certificate program.

Demonstrate organizational skills related to the recording process by creating an instructional proposal for the identified project.

Identify and assemble the necessary elements to complete their project including but not limited to: equipment, performers, space, time, and permissions.

Anticipate problems that may be encountered during the project and select the appropriate solutions to those problems.

Demonstrate the ability to work independently by completing the project according to the described instructional plan.

Evaluate the project by identifying successes and failures encountered during the project.

Express the technical aspects of a recording project by presenting the evaluation to the class.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
1. Written projects.
2. Individual recording project with oral presentation.
3. Peer review.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for MUS 229

MUS232 - History of Western Music 1

Overview

Subject
Music

Academic Department
Fine & Performing Arts

School
Liberal Arts

Course Description
An intensive course providing a practical background in Western music from Greek Antiquity to 1750. Musical forms, styles, composers, compositions, and important influences on the development of Western music are covered through text readings, listening examples, and class discussion.

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
10

Academic Level
Undergraduate

General Education Category
Humanities and Fine Arts

Michigan Transfer Agreement (MTA) Category
Category 5: Humanities and Fine Arts - Applied Degrees, Category 5: Humanities and Fine Arts - Transfer Degrees

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
Determined by department

Goals, Topics, and Objectives

Course Goals
This course develops the student's ability to apply intelligent listening habits to the varied forms and styles of Western music from Greek Antiquity to 1750. Historical style analysis and accuracy of listening and identification are developed.

Core Course Topics
1. Musical Antiquity
2. Medieval Music 1

   Development of chant, Development of organum, Evolution of the Mass
3. Medieval Music 2

   Comparison and contrast of ars antiqua and ars nova, Formes fixes, Motet, relevant composers
4. Renaissance

   Comparison and contrast of mass, madrigal, and motet with each other and the previous period, Development of instrumental forms, Humanism, Relevant composers
5. Baroque

   Vocal music, Instrumental music, Opera, Relevant composers

Recognize musical compositions from each era

Demonstrate a knowledge of the social background of each era

Distinguish among major composers

Locate and list CDs which are examples of styles and genres studied in class

Demonstrate a knowledge of musical style in each of the traditional historical periods of music history

Demonstrate a basic knowledge of the elements used in a musical composition and determine the logical and artistic reasons for their use

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
- Homework assignments
- Written quizzes, tests
- Listening quizzes, tests

Texts
Concise History of Western Music, Hanning

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for MUS 232

MUS233 - History of Western Music 2

Overview

Subject
Music

Academic Department
Fine & Performing Arts

School
Liberal Arts

Course Description
An intensive course providing a practical background in Western music from 1750 to the present. Musical forms, styles, composers, compositions, and important influences on the development of Western music are covered through text readings, listening examples, and class discussion.

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
10

Academic Level
Undergraduate

General Education Category
Humanities and Fine Arts

Michigan Transfer Agreement (MTA) Category
Category 5: Humanities and Fine Arts - Applied Degrees, Category 5: Humanities and Fine Arts - Transfer Degrees

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
Determined by department

Goals, Topics, and Objectives

Course Goals
This course develops the student's ability to apply intelligent listening habits to the varied forms and styles of Western music from 1750 to present. Historical style analysis and accuracy of listening and identification are developed.

Core Course Topics

1. Rococo

   Transition to Classical, Style gallant, empfindsamer stil, sturm and drang, Relevant composers

2. Classical

   Enlightenment, Haydn, Mozart, Beethoven, Minor composers, Comparison and contrast with Baroque and Rococo, Development of sonata form in Classical, showing evolution from Baroque and Rococo, Development of variation form, showing evolution from previous period, Evolution of contrapuntal forms through classical

3. Romantic

   Evolution of forms, The romantic ideals, Evolution of chromaticism, The great song cycles, Relevant composers

4. Post Romantic

   Tone poem, Thematic transformation in sonata form from Beethoven, Program music, Music drama, Wagner Richard Strauss, Expansion of tonality to breaking point, Relevant composers

5. Twentieth Century

   Debussy, Fauré, Impressionism, Ravel, Neoclassicism, The evolution of twelve tone techniques, relevant composers, Stravinsky, Ives, Bartok, Hindemith, the Russians, Nationalism in music, Electronic sources, formalized music, relevant composers, Concrete, aleatoric techniques, Messiaen and disciples, Total serialization, Minimalism, relevant composers, Contrapuntal technique in twentieth-century music, Introduction to American music, Charles Ives, Charlie Parker

Demonstrate a knowledge of musical style in each of the traditional historical periods of music history
Recognize musical compositions from each era
Distinguish among major composers
Describe the elements used in a musical composition
Locate and list CDs which are examples of styles and genres studied in class
Demonstrate a knowledge of the social background of each era and give reasons why it resulted in the music of that era

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
- Listening Exams
- Terminology Exams
- Research projects

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for MUS 233

MUS238 - Music Theory 3

Overview

Subject
Music

Academic Department
Fine & Performing Arts

School
Liberal Arts

Course Description
Covers secondary dominants and borrowed chords, the use of the Neapolitan sixth, advanced modulation techniques, and how to identify non-chord tones.

Course Pre-requisite(s)
MUS139 Music Theory 2

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
10

Academic Level
Undergraduate

General Education Category
Humanities and Fine Arts

Michigan Transfer Agreement (MTA) Category
Category 5: Humanities and Fine Arts - Applied Degrees, Category 5: Humanities and Fine Arts - Transfer Degrees

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
Determined by department

Goals, Topics, and Objectives

Core Course Topics

1. Review of secondary dominants and chords borrowed from the parallel minor.
2. Intense study of typical and atypical usage of N6 chord.
3. Study of typical and atypical use of Aug 6 chords.
4. Correct application of ninth, eleventh, and thirteenth chords, including jazz voicing.
5. Study of altered dominants and chromatic mediants.
6. Analysis and original composition.
7. A complete study of chord progression.
8. Coordination of all tonal part writing procedures.

Consolidate use of secondary dominants and borrowed chords.
Practice the use of the Neapolitan sixth.
Demonstrate a mastery of advanced modulation techniques.
Identify non-chord tones.
Interpret chord progressions including diatonic, chromatic, and thirds progressions.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
- Musical Compositions
- Homework assignments
- Written quizzes, tests

Texts
Harmonic Materials in Tonal Music, Part 2, by Harder, P. & Steinke, G. Allyn and Bacon/Longman Publishers

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for MUS 238

MUS243 - Vocal Jazz Ensemble 3

Overview

Subject
Music

Academic Department
Fine & Performing Arts

School
Liberal Arts

Course Description
Third of four sequential semesters of vocal jazz esemble, covering preparation and performance of a variety of jazz and popular music in an ensemble of 8-20 voices. Group performs for various HFC and community functions.

Course Pre-requisite(s)
MUS144 Vocal Jazz Ensemble 2 or Audition

Credit Hours
1

Total Contact Hours

Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
15

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Interview

Credit for Prior College Level Learning (CPCLL) Details
Determined by department

Goals, Topics, and Objectives

Course Goals
The purpose of this course is to challenge musicians to develop individual and ensemble performance skills in vocal jazz music. The student will take part in campus and community concerts.

Core Course Topics

1. Vocal Warmup
2. Rehearsals
3. Sight-reading
4. Musical voice (personal tone)
5. Performances

Demonstrate a vocal warmup routine, including vocal jazz harmony and improvisation exercises, at a reinforcement to mastery level.

Perform their appropriate vocal part (soprano, alto, tenor, or bass), on representative vocal jazz literature, in sectional, full chorus, and mixed standing arrangement rehearsals, at a reinforcement to mastery level.

Demonstrate reinforcement to mastery level in sight-reading skills.

Demonstrate reinforcement to mastery level in the understanding of the dynamic contrast in development of one's musical "voice" or musical tone.

Perform in a variety of live music events, including informal jam sessions, on-campus programs, off-campus programs, and formal concerts, at a reinforcement to mastery level.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement

- Class Participation
- Performance, individually and in groups

Texts
Repertoire will be determined by the instructor

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for MUS 243

MUS244 - Vocal Jazz Ensemble 4

Overview

Subject
Music

Academic Department
Fine & Performing Arts

School
Liberal Arts

Course Description
Fourth of four sequential semesters of vocal jazz ensemble, covering preparation and performance of a variety of jazz and popular music in an ensemble of 8-20 voices. Group performs for various HFC and community functions.

Course Pre-requisite(s)
MUS243 Vocal Jazz Ensemble 3 or Audition

Credit Hours
1

Total Contact Hours

Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
15

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Interview

Credit for Prior College Level Learning (CPCLL) Details
Determined by department

Goals, Topics, and Objectives

Course Goals
The purpose of this course is to challenge musicians to develop individual and ensemble performance skills in vocal jazz music. The student will take part in campus and community concerts.

Core Course Topics

1. Vocal Warmup
2. Rehearsals
3. Sight-reading
4. Musical voice (personal tone)
5. Performances

Demonstrate a vocal warmup routine, including vocal jazz harmony and improvisation exercises, at a mastery level.

Perform their appropriate vocal part (soprano, alto, tenor, or bass), on representative vocal jazz literature, in sectional, full chorus, and mixed standing arrangement rehearsals, at a mastery level.

Demonstrate mastery level in sight-reading skills.

Demonstrate mastery level in the understanding of the dynamic contrast in development of one's musical "voice" or musical tone.

Perform in a variety of live music events, including informal jam sessions, on-campus programs, off-campus programs, and formal concerts, at a mastery level.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement

- Class Participation
- Performance, individually and in groups

Texts
Repertoire will be determined by the instructor.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for MUS 244

MUS291 - Audio Recording Technology 2

Overview

Subject
Music

Academic Department
Fine & Performing Arts

School
Liberal Arts

Course Description
Provides hands-on experience and guided practice in digital recording techniques, advanced digital audio mixing and mastering, and independent problem solving in the recording process. Covers recording sessions, computer files, microphone usage and placement, digitizing principals, audio acquisition options, midi integration, preparing complex digital audio files for duplication, advanced techniques in mixing room acoustics, preparing audio for mixing, software plug-ins, troubleshooting audio problems, equalization, stereo imagery, noise limitation, bit conversion, and session management. Students work in an actual digital recording studio recording a wide variety of instrumental and vocal ensembles. Builds upon the basic competency developed during MUS-191 and MUS-192. Applies advanced skills, workflows, and concepts of recording, editing and mixing on an Avid Pro Tools system learned in MUS-292: Pro Tools 110.

Course Pre-requisite(s)
MUS191 Audio Recording Technology 1, MUS192 Pro Tools 101

Course Co-requisite(s)
MUS292 Pro Tools 110

Credit Hours
4

Total Contact Hours
Total Instructor Contact Hours:
62

Total Student Contact Hours:
62

Course Fee
30

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Interview, Other

Credit for Prior College Level Learning (CPCLL) Details
Determined by department

Goals, Topics, and Objectives

Course Goals
Designed to expand on the knowledge gained in MUS191 Audio Recording Technology 1 and MUS192 Pro Tools 101, and to develop more advanced techniques in audio recording technology, including: mixing and mastering, mix preparation, advanced editing, automation, advanced signal processing, sound design, audio restoration, file delivery for multiple audio formats, critical thinking in the recording environment, and advanced competency in Avid Pro Tools Software.

Core Course Topics
1. Critical Listening Skills
2. Sound Design
3. Advanced Audio Signal Processing
4. Audio Restoration
5. Critical Problem Solving
6. Drum Replacement
7. Advanced Mixing
8. Quantizing and Adjusting Timing of Audio Files
9. Advanced Mastering
10. Creating and Delivering Audio Files for Multiple Formats

Differentiate (aurally) when instruments or voices are in or out of tune. Identify isolated frequency bands of various instruments and pre-recorded music, and determine (aurally) proper presence, ambience, and balance of audio signals
Demonstrate techniques for original sound design, including synthesis, sampling, and advanced signal processing.
Utilize specialized signal processing (plugins) to improve the performances of musicians and singers. Develop an awareness of signal processing that includes either frequency-based or time-based processing, and demonstrate intermediate real-time and file-based signal processing techniques using Pro Tools, including delay-based effects, and side-chain applications in dynamics processors.
Differentiate (aurally) noise types (hum, buzz, RF interference), distortion types (intermodulation, harmonic), and identify and trouble shoot problems with a given audio file (noise reduction and audio repair).
Analyze and produce new recording tactics that address the needs of a specific recording situation.
Demonstrate replacing and reinforcing recorded drums using triggering software, tools, and advanced techniques.
Practice mix automation techniques used in recording consoles and Pro Tools.
Adjust and quantize the timing of a performance within Pro Tools, utilizing advanced techniques including elastic audio.
Develop common mastering techniques used for music and sound recordings and recognize digital artifacts of compression algorithms.
Evaluate common mastering techniques used for different release media, and create audio files in multiple formats.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
- Class critiques
- Quizzes and exams
- Written summaries
- Portfolio assembly and review
- Major Individual project consisting of:

Recording, editing, mixing, automating, and mastering a multitrack song or audio recording demonstrating proficiency in all aspects of the project.

General Course Requirements and Recommendations
Requirements:
- Strong computer skills

Recommendations:
- Fundamental understanding of music theory
- Computer capable of running the latest version of Avid Pro Tools software
- Latest version of Avid Pro Tools Software

Texts
Text to be determined by instructor

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for MUS 291

MUS292 - Pro Tools 110

Overview

Subject
Music

Academic Department
Fine & Performing Arts

School
Liberal Arts

Course Description
Expands upon the principles taught in MUS-192: Pro Tools 101 and introduces the core concepts and skills you will need to operate a Pro Tools system running mid-sized sessions with dozens of tracks. Teaches more advanced skills, and workflows involved in recording, editing, and mixing on an Avid Pro Tools system. Prepares for part two of the Avid Pro Tools online exam for certification. Part one of the certification test is offered in MUS-192: Pro Tools 101. Successful completion of both parts of the exam constitutes Avid Pro Tools certification.

Course Pre-requisite(s)
Eligible to take ENG courses at HFC.Instructor Permission

Credit Hours
2

Total Contact Hours

Total Instructor Contact Hours:
32

Total Student Contact Hours:
32

Course Fee
25

Academic Level
Undergraduate

Goals, Topics, and Objectives

Course Goals
Builds on the fundamental skills learned in MUS192 Pro Tools 101: Pro Tools 101 to create and work with digital audio projects within Pro Tools as well as more advanced recording, editing, and mixing techniques.

Core Course Topics

1. Getting Started
2. Managing Session Data and Media Files
3. Recording MIDI and Audio
4. Working with MIDI and Virtual Instruments
5. Working with Elastic Audio
6. Editing and Fine-Tuning a Performance
7. Additional Editing and Media Management
8. Basic Mixing and Signal Flow
9. Writing and Editing Automation
10. Using Advanced Mixing Techniques and Creating Final Media

Demonstrate how to open a session or project, and add tracks. Utilize Track List, Edit Window, and Mix Window display options.

Identify Pro Tools software capabilities, and digital video options. Determine the use of Workspace Browsers, and Soundbase to locate files. Demonstrate how to import files, import session data, and how to work with clips and clip groups.

Demonstrate how to set up a session, record selections, use loop recording, and audition record takes.

Discuss sample-based versus tick-based tracks and explain MIDI-compatible tracks and track views. Demonstrate how to use virtual instruments, how to audition and playback MIDI, and how to edit MIDI data.

Explain and experiment with elastic audio, including elastic audio track views, warping sound with elastic audio, experimenting with tempo using elastic audio and improving the quality of warped audio. Perform the necessary edits to tighten a rhythmic performance, and to change pitch with elastic audio.

Demonstrate use of the Smart Tool, using fades, quantizing, and MIDI real-time properties.

Utilize clip looping, layered editing, AudioSuite Plug-Ins, and working with the clip list to accomplish editing various editing tasks.

Employ features such as track colors, icons, and status indicators to organize mixes and signal flow. Demonstrate the use of inserts, sends and returns for effects processing. Differentiate between various common uses for gain-based, and time-based plug-ins. Discuss creation and use of Master Fader tracks.

Adapt the various automation modes to utilize automation in a session. Employ graphical editing of automation, cutting, copying and pasting automation data, and removing automation from a track.

Identify how to work with track subsets, how to route track signals, and how to group tracks in various ways. Demonstrate how to create a distribution-ready bounce. Explain and justify the need for creating an archive.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement

- In-Class and Homework Assignments
- Quizzes
- Projects

Texts
Pro Tools 110: Pro Tools Fundamentals II

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for MUS 292

MUS299 - Recording Arts Capstone

Overview

Subject
Music

Academic Department
Fine & Performing Arts

School
Liberal Arts

Course Description
As the capstone for the Recording Arts Certificate program, course provides special study in audio recording and is intended for students completing the Certificate program. Students choose the topic for study and design an instructional plan under the guidance and approval of instructor. Must complete a major project that demonstrates skills and knowledge learned in the program, and project is presented at the end of the semester.

Course Co-requisite(s)
MUS291 Audio Recording Technology 2, MUS292 Pro Tools 110

Credit Hours
2

Total Contact Hours

Total Instructor Contact Hours:
32

Total Student Contact Hours:
32

Course Fee
20

Academic Level
Undergraduate

Goals, Topics, and Objectives

Course Goals
Provides for in-depth exploration of the topics and skills related to digital audio recording based upon personal interests. Allows for project development under the guidance and approval of the instructor. Topics must relate to the application of digital recording knowledge and skills gained through participation in the Recording Arts Certificate program.

Core Course Topics

1. Project Development and Organization
2. Project Evaluation
3. Demonstration and Presentation

Demonstrate the ability to create, propose, and develop an audio project in line with interests, and establish a basic timeline by which to complete each portion of the project.

Evaluate the ongoing status of proposed project and modify as needed to ensure completion of project by the end of the school semester.

Prepare and present an in-class demonstration of the final project.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement

- Written Projects
- Individual recording project with oral presentation
- Peer review

Texts
Text to be determined by instructor

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for MUS 299

NCS112 - Competency Evaluated NursingAssis(CENA)

Overview

Subject
Nursing

Academic Department
Nursing

School
Health & Human Services

Course Description
Prepares individuals to become a Nurse Aide. This course serves as the educational foundation for the Nursing Care Skills certificate. Aides render care to clients in hospitals, long-term care facilities, and in home-care. This course, and the Nursing Care Skills certificate, consists of 35 hours of course work in theory, 45 hours of laboratory activities, and 20 hours in a clinical agency. The course requires consistent attendance from 9:00 a.m. - 2:30 p.m. four days a week.

Course Pre-requisite(s)
High School diploma/GED; or a "C" grade or better in ENG131 Introduction College Writing or a satisfactory score on the English placement exam. Current Basic Life Support (CPR) card from American Red Cross or American Heart Association. Drug screening and criminal background check.

Credit Hours
4

Total Contact Hours
Total Instructor Contact Hours:
100

Total Student Contact Hours:
100

Course Fee
300

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Licensure/certifications

Credit for Prior College Level Learning (CPCLL) Details
Licensure/Certification Details

Upon successful completion of the course, students are eligible to take the State of Michigan Nurse Aide Competency exam for certification. Students must pass a knowledge test and a clinical skills test to receive the Certified Nursing Assistant (CNA) designation. This exam is not included in this course.

Goals, Topics, and Objectives

Course Goals
* That 97% of our students will pass the state of Michigan competency evaluated nurse assistant exam on the first attempt
* That 90% of our students will earn a B grade or better in this course.

Core Course Topics

1. Introduction to Health Care and the Role of the Nursing Assistant
2. Nursing Assistant as a Member of the Health Care Team
3. Human Interaction Skills
4. Infection Control in Health Care
5. Basic Emergency Care/safety/Employability skills
6. Personal Care Skills
7. Care of the Residents Environment
8. Care of the Resident with an Cognitive Impairment
9. Creating an Environment for Restraint Elimination, Reduction, and Appropriate Use
10. Vital Signs, Weight, and Height
11. Meeting Nutrition and Hydration Needs
12. Elimination
13. Restorative/Rehabilitative Care
14. Care of the Resident with a Developmental Disability
15. Death and Dying
16. Care of the Resident with Depression
17. Care of the Resident with a Communicable Disease
18. Major Body Systems - Integumentary, Musculoskeletal, Nervous, Cardiovascular, Respiratory, Urinary, Endocrine, Reproductive and Lymphatic

Identify the roles and responsibilities of the nurse aide in delivering competent health care in long-term and acute settings.
Develop a relationship, communicate, and interact competently on a one-to-one basis with the residents.
Demonstrate sensitivity to residents' emotional, social, and mental health through skillful, directed interactions.
Prepare residents to attain and maintain functional independence.
Demonstrate behavior in support and promotion of residents' rights.
Demonstrate observational and documenting skills needed in the assessment of residents' health, physical condition, and well-being.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of Academic Achievement will be identified and implemented by the class instructor. Methods will include, but not be limited to, grades on individual projects, vocabulary, class participation (discussion and critiques) and tests on material.

General Course Requirements and Recommendations

1. Students must attain 80 percent on a test to demonstrate proficiency.
2. Drug screening and criminal background check must be done and paid by the student.

Grading Scale
Student grades will be assigned using the following scale:

- 98-100% = A+
- 95-97% = A
- 92-94% = A-
- 90-91% = B+
- 87-89% = B
- 85-86% = B-
- 81-84% = C+
- 80% = C
- 78-79% = C-
- 75-77% = D+
- 73-74% = D
- 71-72% = D-
- 70% and Below = E

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for NCS 112

NSG101 - Beginning Health & Physical Assessment

Overview

Subject
Nursing

Academic Department
Nursing

School
Health & Human Services

Course Description
This course will introduce how to obtain a patient history, and perform a health and physical examination on an adult patient. Emphasis will focus on interviewing patients, hands on physical assessment, documentation and developing appropriate nursing diagnoses. Final project requires the successful demonstration of a comprehensive head-to-toe physical assessment at the beginner level. Recommended for students entering the nursing program, re-admitting to the program, or supplementing beginning skills and knowledge of physical assessment.

Course Pre-requisite(s)
BIO233 Anatomy and Physiology I, BIO134 Essentials Anatomy&Physiology, ENG131 Introduction College Writing, HCS131 Computers in Health Care or CIS100 Intro Info Tech, PSY131 Introductory Psychology, One of the following Math courses: MATH115 College Algebra, MATH131 Math for the Modern World , MATH141 Introduction to Statistics, MATH165 Mathematics for Calculus, MATH175 Precalculus, MATH180 Calculus 1, All with a minimum grade of C, or instructor permission.

Course Co-requisite(s)
NSG117 Medical-Surgical Nursing I, NSG116 Pharmacology for NSG Practice

Credit Hours
2

Total Contact Hours
Total Instructor Contact Hours:
32

Total Student Contact Hours:
32

Course Fee
100

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Skilled Demonstration

Credit for Prior College Level Learning (CPCLL) Details
Skilled Demonstration Details

Health Appraisal demonstration, given in department-by-department faculty. Faculty will assess demonstration and determine satisfactory completion based on evaluation rubric. Evaluation rubric and student checklist located in The School of Health and Human Services office. Maximum number of attempts: two.

Goals, Topics, and Objectives

Core Course Topics

1. Patient health and physical assessment overview and relationship to nursing practice.
2. Definition, purpose, and components of patient health history and physical exam assessment.
3. Techniques and nursing skills employed in obtaining a patient health history (subjective data) and conducting a comprehensive cephalocaudal physical assessment/examination (objective data).
4. Proper documentation using medical terminology of the client history and physical assessment data.
5. Identification of expected (normal) health history and physical examination findings.
6. Privacy and safety guidelines that affect client assessment.

Discuss systematic method of collecting and analyzing data for the purpose of planning patient care.
Demonstrate how to obtain and document a client health history and physical examination data.
Correctly perform a cephalocaudal physical examination properly utilizing assessment techniques on an adult model while providing comfort, safety and privacy throughout the exam. Correctly document patient subjective data on health history.
Accurately document patients subjective and objective data.
Correlate normal and abnormal health history and physical assessment findings with subjective and objective patient data.
Perform assessment techniques on an adult model while providing comfort, safety and privacy throughout exam.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessments of academic achievement may include, but are not limited to completing a head -toe physical assessment skill demonstration, written assignments, and multiple choice testing.

Grading Scale
Theory grade of 80% or better.

Course grading scale:

- 97-100 = A+
- 94-96 = A
- 92-93 = A-
- 88-91 = B+
- 85-87 = B
- 83-84 = B-
- 81-82 = C+
- 80 = C
- 77-79 = C-
- 74-76 = D+
- 72-73 = D
- 70-71 = D-
- 69 and below = E

In addition to passing the theory content, student must also satisfactorily demonstrate and pass by 80%, all sections of the physical exam and complete a head to toe exam on an adult model applying professional standards and guidelines while providing privacy and attending to client comfort. A graded evaluation tool is used to grade student performance.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for NSG 101

NSG116 - Pharmacology for Nursing Practice

Overview

Subject
Nursing

Academic Department
Nursing

School
Health & Human Services

Course Description
This course is designed to provide a foundation in the basic principles of pharmacology that utilize clinical judgment and the nursing process for safe medication administration. Legal and ethical nursing responsibilities and rationale for understanding current drug therapy involved in the common disorders of the major body systems are also included. Routes of medication administration, client education, and dosage calculations are components of this course.

Course Pre-requisite(s)
BIO233 Anatomy and Physiology I, BIO134 Essentials Anatomy&Physiology, ENG131 Introduction College Writing, HCS131 Computers in Health Care or CIS100 Intro Info Tech, PSY131 Introductory Psychology, One of the following Math courses: MATH115 College Algebra, MATH131 Math for the Modern World , MATH141 Introduction to Statistics, MATH165 Mathematics for Calculus , MATH175 Precalculus, MATH180 Calculus 1, All with a minimum grade of C, or instructor permission.

Course Co-requisite(s)
NSG101 Begin Health &Phys Assessment, NSG117 Medical-Surgical Nursing I

Credit Hours
4

Total Contact Hours
Total Instructor Contact Hours:
62

Total Student Contact Hours:
62

Course Fee
25

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Departmental Exam, Other Exam

Credit for Prior College Level Learning (CPCLL) Details
Minimum Departmental Exam Score

80.00%

Departmental Exam Details

Couse Final Exam

Minimum Score on Other Exam

900

Other Exam Details

HESI Pharmacology Exam with a score of 900 or higher. Maximum number of attempts: two

Goals, Topics, and Objectives

Core Course Topics

1. Introduction to Principles of Pharmacology
2. Medication Dosage
3. Calculation
4. Legal, Cultural and Ethics and Safe Medication
5. Administration
6. Clinical Reasoning
7. Antidiabetic Medications
8. Antibiotic, Antiviral Medications, Antifungal, Antiprotozoal
9. Medications for Pain
10. CNS Depressants/Stimulants
11. Thyroid/Anti-Thyroid Medications
12. Genitourinary Medications
13. Respiratory Medications
14. Cardiac/Cardiovascular Medications
15. Anti-seizure, Anti-Parkinson Medications
16. Adrenal Medications
17. Gastrointestinal Medications
18. Immunosuppressant Medications
19. Immunizing Medications
20. Cholinergic/Anti-Cholinergic Medications
21. IV fluid replacement
22. Ophthalmic Medications
23. Specialty Population Medications

Describe, define, and differentiate the principles of pharmacology, pharmacokinetics, and pharmacodynamics for the stated drug classifications.

Describe, define, and differentiate the terms: toxicity, overdose, adverse drug reactions, adverse effects, drug interactions, idiosyncratic reactions, anaphylactic shock, allergic reaction, tolerance, cumulative effect, synergism, and potentiation.

Identify drug interactions (Drug-drug, OTC, reactional medications, supplements)

Describe factors that affect medication absorption and response.

Describe the advantages versus disadvantages of the drug administration routes.

Calculate medication dosages with 90% or higher accuracy.

Describe the nurse's role in safe administration of medications.

Recognize the nursing process, evidence-based practice, and National Client Safety Standards to safely administer the medications.

Utilize the nursing process, evidence-based practice, and National Client Safety Standards to safely administer the medications.

Describe equitable accessibility to medications.

Use the principles of safe medication administration when considering the legal and ethical responsibility of administering medications.

Identify how to effectively communicate and manage medication order discrepancies and medication errors.

State drug classifications, actions and interactions associated with pathophysiology of disease.

Assess learning needs and implement appropriate teaching.

Illustrate common life span considerations in teaching clients about their medications.

List the names and describe actions, indications, possible side effects, and adverse effects of anticoagulant and antiplatelet medications.

Identify and describe reversal agents and treatments for anticoagulants and antiplatelet medications.

List the names and describe actions, indications, possible side effects, and adverse effects of insulin and other glucose lowering medications.

Describe the treatment for hyperglycemia and hypoglycemia.

List the names and describe actions, indications, possible side effects, and adverse effects of insulin and other glucose lowering medications.

Describe the treatment for hyperglycemia and hypoglycemia.

List the names, describe actions, indications, possible side effects, and adverse effects of the medications for pain.

Define multimodal pain control.

Differentiate between analgesic and antipyretic agents.

Identify and describe reversal agents and treatments for medications for pain.

List the names and describe actions, indications, possible side effects, and adverse effects of CNS depressant and stimulants.

List the names and describe actions, indications, possible side effects, and adverse effects of thyroid medications.

List the names and describe actions, indications, possible side effects, and adverse effects of genitourinary medications.

List the names and describe actions, indications, possible side effects, and adverse effects of respiratory medications.

List the names and describe actions, indications, possible side effects, and adverse effects of cardiac/cardiovascular medications.

List the names and describe actions, indications, possible side effects, and adverse effects of medications used to treat seizures, Alzheimer's disease and Parkinson's disease.

List the names and describe actions, indications, possible side effects, and adverse effects of medications that affect the adrenal system.

List the names and describe actions, indications, possible side effects, and adverse effects of gastrointestinal medications.

List the names and describe actions, indications, possible side effects, and adverse effects of immunosuppressant medications.

List the names, describe actions, list indications, possible side effects, and adverse effects of medications for immunizing medications.

List the names and describe actions, indications, possible side effects, and adverse effects of cholinergic and anticholinergic medications.

Compare the different types of IV fluid replacement therapies and indications for use.

Describe the proper technique to administer eye drops and eye ointments.

List the names, describe actions, possible side effects, and adverse effects of medications for mental health disorders.

List the names and describe actions, indications, possible side effects, and adverse effects of reversal medications for benzodiazepines.

List the names, describe actions, possible side effects, and adverse effects of medications for labor and delivery, women's health.

List the names, describe actions, possible side effects, and adverse effects of medications for Pediatrics.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessments of academic achievement may include, but are not limited to medication dosage calculations, simulation, case studies, quizzes, and exams.

Grading Scale
Theory grade of 80% or higher required to pass course.

Course grading scale:

- 97-100 = A+
- 94-96 = A
- 92-93 = A-
- 88-91 = B+
- 85-87 = B
- 83-84 = B-
- 81-82 = C+
- 80 = C
- 77-79 = C-
- 74-76 = D+
- 72-73 = D
- 70-71 = D-
- 69 and below = E

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for NSG 116

NSG117 - Medical-Surgical Nursing I

Overview

Subject
Nursing

Academic Department
Nursing

School
Health & Human Services

Course Description
Introduces the first semester nursing student to the role of the professional nurse as the provider of care for adult clients and a member of the profession. Explains how to utilize critical thinking skills in a systematic, problem solving process as a framework for providing care. Provides a framework for best practices, to think critically, assess factors that influence safe and effective care delivery, and integrate theory with care of clients. This course includes supervised clinical agency/laboratory practicums. Course comprised of four hours of theory and one day of clinical/lab per week.

Course Pre-requisite(s)
BIO233 Anatomy and Physiology I, BIO134 Essentials Anatomy&Physiology, ENG131 Introduction College Writing, HCS131 Computers in Health Care or CIS100 Intro Info Tech, PSY131 Introductory Psychology, One of the following Math courses: MATH115 College Algebra, MATH131 Math for the Modern World , MATH141 Introduction to Statistics, MATH165 Mathematics for Calculus, MATH175 Precalculus, MATH180 Calculus 1, All with a minimum grade of C, or instructor permission.

Course Co-requisite(s)
NSG101 Begin Health &Phys Assessment, NSG116 Pharmacology for NSG Practice

Credit Hours
6

Total Contact Hours
Total Instructor Contact Hours:
152

Total Student Contact Hours:
152

Course Fee
515

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Departmental Exam, Other Exam, Skilled Demonstration, Other

Credit for Prior College Level Learning (CPCLL) Details
Minimum Departmental Exam Score

80.00

Minimum Score on Other Exam

900

Other Exam Details

Fundamental HESI exam with score 900 or higher. Maximum number of attempts: two. Students must also perform skill demonstrations

Skilled Demonstration Details

Level 1 Skills demonstration, given in department by department faculty. Faculty will assess demonstration and determine satisfactory completion based on evaluation rubric. Evaluation rubric and student checklist located in The School of Health and Human Services office. Maximum number of attempts on each skilled demonstration: two. Students must also take an exam.

Other Details

Provide documentation of a minimum of 2000 hours of work experience (equal to one year of full-time employment within the last two years) as an LPN.

Goals, Topics, and Objectives

Core Course Topics

1. Caring
2. Clinical Decision Making
3. Communication
4. Culture
5. Diversity
6. Evidenced Based Practice
7. Health
8. Illness
9. Safety
10. Wellness
11. Elimination
12. Ethics
13. Sleep
14. Nutrition
15. Infection
16. Inflammation
17. Legal
18. Nursing Process
19. Oxygenation
20. Patient Education
21. Perfusion
22. Professionalism
23. Spirituality
24. Tissue Integrity
25. Mobility

Locate and begin to use evidence based research to improve client outcomes.

Utilize effective strategies to communicate, including computer based charting, with clients and other members of the health care team.

Begin to apply the nursing process and standards of care to manage ill or injured adult clients and to promote health and wellness.

Identify cultural diversity using the professional nursing values of legal, ethical and caring behaviors for the adult client.

Explain effective strategies to collaborate with other members of the health care team to provide quality care and maintain client safety while reducing the risk of harm to the client.

Utilize critical thinking and clinical reasoning to make sound clinical judgement.

Demonstrate advocacy for the adult client to facilitate the client's autonomy and full partnership in their care.

Demonstrate competency in the learned technical skills used to care for clients in clinical, utilizing cognitive and psychomotor skills.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessments of academic achievement may include , but are not limited to skills demonstration, written assignments, research papers, case studies, multiple choice testing and hands-on clinical practice.

Grading Scale
Theory Grade of 80% or better and a Satisfactory grade in clinical.

Course Grading Scale:

- 97-100 = A+
- 94-96 = A
- 92-93 = A-
- 88-91 = B+
- 85-87 = B
- 83-84 = B-
- 81-82 = C+
- 80 = C
- 77-79 = C-
- 74-76 = D+
- 72-73 = D
- 70-71 = D-
- 69 and below = E

2. Course Clinical Grade: S= Satisfactory and U = Unsatisfactory

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for NSG 117

NSG119 - Medical-Surgical Nursing II

Overview

Subject
Nursing

Academic Department
Nursing

School
Health & Human Services

Course Description
Continues to explore how to utilize critical thinking skills in a systematic, problem solving process, as a framework for providing safe and effective care to restore and promote health in adult clients. Focuses on nursing care related to concepts of healthy adult clients as well as adult clients with common, acute, or chronic illness exemplars, and explains how to research best practices and integrate theory in the care of adult clients and families in a variety of clinical settings. This course includes supervised clinical agency/laboratory practicums. Course comprised of four hours of theory and a clinical/lab day per week.

Course Pre-requisite(s)
NSG101 Begin Health &Phys Assessment, NSG116 Pharmacology for NSG Practice, NSG117 Medical-Surgical Nursing I with a minimum grade of C

Course Co-requisite(s)
NSG121 Psychiatric Mental Health Nurs or Nursing department permission.

Credit Hours

6

Total Contact Hours

Total Instructor Contact Hours:
152

Total Student Contact Hours:
152

Course Fee
425

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other Exam, Skilled Demonstration

Credit for Prior College Level Learning (CPCLL) Details
Other Exam Details

Fundamental HESI exam with score 900 or higher. Maximum number of attempts: two. Students must also perform a skill(s) demonstration.

Skilled Demonstration Details

Level 1 and Level 2 Skills demonstration, given in department-by-department faculty. Faculty will assess demonstration and determine satisfactory completion based on evaluation rubric. Evaluation rubric and student checklist located in The School of Health and Human Services office. Maximum number of attempts on each skilled demonstration: two. Students must also take an exam.

Goals, Topics, and Objectives

Core Course Topics

1. Caring
2. Clinical Decision Making
3. Communication
4. Culture
5. Diversity
6. Evidence Based Practice
7. Health
8. Illness
9. Safety
10. Wellness
11. Acid-Base
12. Cellular Regulation
13. Collaboration
14. Comfort
15. Fluid and Electrolytes
16. Immunity
17. Infection
18. Inflammation
19. Informatics
20. Metabolism
21. Mobility
22. The Surgical Client
23. Perfusion
24. Professionalism
25. Sensory Perception

Describe the use of evidence based research to improve clients' outcomes.

Use effective strategies, including computer based charting, to communicate with clients and other members of the health care team.

Utilize the nursing process and standards of care to manage ill or injured adult clients and to promote health and wellness.

Explain cultural diversity using the professional nursing values of legal, ethical and caring behaviors for the adult client.

Explain effective strategies to collaborate with other members of the health care team to provide quality care and maintain client safety while reducing the risk of harm to the client.

Utilize critical thinking and clinical reasoning to make sound clinical judgments.

Explain advocacy for the adult client to facilitate the client's autonomy and full partnership in their care.

Demonstrate competency in the learned technical skills used to care for clients in clinical, utilizing cognitive and psycho-motor skills.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessments of academic achievement may include, but are not limited to skills demonstration, written assignments, research papers, case studies, multiple choice testing and hands-on clinical practice

Grading Scale
Theory grade of 80% or better and a satisfactory grade in clinical.

Course grading scale:

- 97-100: A+
- 94-96: A
- 92-93: A-
- 88-91: B+
- 85-87: B
- 83-84: B-
- 81-82: C+
- 80: C
- 77-79: C-
- 74-76: D+
- 72-73: D
- 70-71:D-
- 69 and below: E

Course Clinical Grade: S = Satisfactory and U = Unsatisfactory

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for NSG 119

NSG121 - Psychiatric Mental Health Nursing

Overview

Subject
Nursing

Academic Department
Nursing

School
Health & Human Services

Course Description
Introduces the second semester nursing student to the role of the nurse as a provider of care for clients with mental health disorders with emphasis on therapeutic communication techniques. Course presents the mental-health/mental-illness continuum as a framework for differentiating between healthy and unhealthy mental health behaviors. Discusses how to utilizes critical thinking skills, in a systematic, problem solving process, to provide safe and effective care to clients in the psychiatric mental health setting. This course includes supervised clinical agency/laboratory practicums. Course comprised of two hours of lecture and six hours of lab/clinical per week.

Course Pre-requisite(s)
NSG101 Begin Health &Phys Assessment, NSG116 Pharmacology for NSG Practice, NSG117 Medical-Surgical Nursing I with a minimum grade of C

Course Co-requisite(s)
NSG119 Medical-Surgical Nursing II or Nursing department permission.

Credit Hours
4

Total Contact Hours
Total Instructor Contact Hours:
122

Total Student Contact Hours:
122

Course Fee
360

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other Exam, Skilled Demonstration

Credit for Prior College Level Learning (CPCLL) Details
Other Exam Details

Mental Health/Psychiatric HESI exam with score 900 or higher. Maximum number of attempts: two. Students must also perform a psychiatric simulation demonstration.

Skilled Demonstration Details

Psychiatric Simulation demonstration, given in department-by-department faculty. Faculty will assess demonstration based on evaluation rubric. Evaluation rubric and student checklist located in The School of Health and Human Services office. Student must pass the graded rubric with an 80% or higher with the maximum number of attempts: two. Students must also take an exam.

Goals, Topics, and Objectives

Core Course Topics

1. Caring
2. Clinical Decision Making
3. Communication
4. Culture
5. Diversity
6. Evidence Based Practice
7. Health
8. Illness
9. Safety
10. Wellness
11. Addictions
12. Advocacy
13. Anxiety
14. Cognition
15. Collaboration
16. Ethics
17. Grief
18. Health Care Systems
19. Legal
20. Mood and Affect
21. Patient Education
22. Psychosis
23. Self
24. Stress and Coping
25. Spirituality
26. Violence

Incorporate evidence-based practice in the care of clients in the psychiatric mental health setting.

Utilize effective strategies (therapeutic and interpersonal communication skills) to communicate with clients and others of the health care team.

Utilize the nursing process and standards of care to safely manage care of clients in the psychiatric mental health setting.

Discuss the importance of understanding cultural variation when planning and implementing care.

Collaborate with clients, significant others, and members of the health care delivery team to promote optimal care.

Give examples of critical thinking and clinical reasoning to make sound clinical judgments in the care of clients in the psychiatric mental health setting.

Identify the rights of mental health clients when advocating for compassionate care.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessments of academic achievement may include, but are not limited to skills demonstration, written assignments, research papers, case studies, multiple choice testing and hands-on clinical practice

Grading Scale
Theory Grade of 80% or better and a Satisfactory grade in clinical.

Course grading scale:

- 97-100 = A+
- 94-96 = A
- 92-93 = A-
- 88-91 = B+
- 85-87 = B
- 83-84 = B-
- 81-82 = C+
- 80 = C
- 77-79 = C-
- 74-76 = D+
- 72-73 = D
- 70-71 = D-
- 69 and below = E

Course Clinical Grade: S = Satisfactory and U = Unsatisfactory

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for NSG 121

NSG202 - Medical-Surgical Nursing III

Overview

Subject
Nursing

Academic Department
Nursing

School
Health & Human Services

Course Description
Focuses on nursing care and concepts related to the healthy adult client as well as the adult client with common, acute, or chronic illness exemplars. Emphasizes the use of critical thinking skills in a systematic, problem solving process, as a framework for providing safe and effective care to restore and promote health in adults. Discusses how to research best practices and integrate theory in the care of adult clients and their families in a variety of clinical settings.This course includes supervised clinical agency/laboratory practicums. Course comprised of four hours of theory and a clinical/lab per week.

Course Pre-requisite(s)
NSG119 Medical-Surgical Nursing II, NSG121 Psychiatric Mental Health Nurs with minimum grade of C.

Course Co-requisite(s)
NSG217 Pediatric Nursing, NSG218 Women's Hlth & Maternity Care or Nursing department permission.

Credit Hours
6

Total Contact Hours
Total Instructor Contact Hours:
152

Total Student Contact Hours:
152

Course Fee
356

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other Exam, Skilled Demonstration

Credit for Prior College Level Learning (CPCLL) Details
Other Exam Details

Medical Surgical HESI exam with score 900 or higher. Maximum number of attempts: two. Students must also perform a medical surgical simulation demonstration.

Skilled Demonstration Details

Medical Surgical Simulation demonstration, given in department-by-department faculty. Faculty will assess demonstration based on evaluation rubric. Evaluation rubric and student checklist located in The School of Health and Human Services office. Student must pass the graded rubric with an 80% or higher with the maximum number of attempts: two. Students must also take an exam.

Goals, Topics, and Objectives

Core Course Topics

1. Caring
2. Clinical Decision Making
3. Communication
4. Culture
5. Diversity
6. Evidence Based Practice
7. Health
8. Illness
9. Safety
10. Wellness
11. Cellular Regulation
12. Collaboration
13. Elimination
14. Fluid and Electrolytes
15. Immunity
16. Infection
17. Inflammation
18. Leadership and Management
19. Oxygenation
20. Perfusion
21. Professionalism
22. Time Management and Organization

Apply evidence-based research to improve clients' outcomes.

Use effective strategies to communicate, including computer-based charting, with clients and other members of the health care team.

Apply the nursing process and standards of care to manage ill or injured adult clients and to promote health and wellness.

Illustrate cultural diversity using the professional nursing values of legal, ethical and caring behaviors for the adult client.

Categorize effective strategies to collaborate with other members of the health care team to provide quality care and maintain client safety while reducing the risk of harm to the client.

Demonstrate critical thinking and clinical reasoning to make sound clinical judgments.

Explain advocacy for the adult client to facilitate the client's autonomy and full partnership in their care.

Demonstrate competency in the learned technical skills used to care for clients in clinical utilizing cognitive and psycho-motor skills.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessments of academic achievement may include, but are not limited to skills demonstration, written assignments, research papers, case studies, multiple choice testing and hands-on clinical practice.

Grading Scale
Theory grade of 80% or better and a satisfactory grade in clinical.

Course grading scale:

- 97-100 = A+
- 94-96 = A
- 92-93 = A-
- 88-91 = B+
- 85-87 = B
- 83-84 = B-
- 81-82 = C+
- 80 = C
- 77-79 = C-
- 74-76 = D+
- 72-73 = D
- 70-71 = D-
- 69 and below = E

Course Clinical Grade: S = Satisfactory and U = Unsatisfactory

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for NSG 202

NSG209 - Medical-Surgical Nursing IV

Overview

Subject
Nursing

Academic Department
Nursing

School
Health & Human Services

Course Description
Continues to study the role of the professional nurse as the provider of care for adult clients with complex needs and as a member of the profession. Builds on previous knowledge using critical thinking skills in a systematic, problem solving process as a framework for providing safe and effective care to restore and promote health in adult clients. Focuses on nursing care and concepts related to the healthy adult client as well as, the adult client with common, acute, or chronic illness exemplars. Also explores how to demonstrate proficiency in performing increasing complex nursing skills, and how to research best practices and integrate theory into the care of adult clients and their families in a variety of clinical settings. This course includes supervised clinical agency/laboratory practicums. This course includes supervised clinical agency/laboratory practicums. Course is comprised of a combination of theory and a clinical/lab experience per week.

Course Pre-requisite(s)
NSG202 Medical-Surgical Nursing III, NSG217 Pediatric Nursing, NSG218 Women's Hlth & Maternity Care with minimum grade of C.

Course Co-requisite(s)
NSG202 Medical-Surgical Nursing III, NSG212 Professional Transitionsor Nursing department permission.

Credit Hours
6

Total Contact Hours
Total Instructor Contact Hours:
152

Total Student Contact Hours:
152

Course Fee
356

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Caring
2. Clinical Decision Making
3. Communication
4. Culture
5. Diversity
6. Evidence Based Practice
7. Health
8. Illness
9. Safety
10. Wellness
11. Advocacy
12. Collaboration
13. Ethics
14. Family Dynamics
15. Fluid and Electrolytes
16. Immunity
17. Infection
18. Intracranial Regulation
19. Leadership and Management
20. Metabolism
21. Mobility
22. Oxygenation
23. Perfusion
24. Professionalism
25. Spirituality
26. Thermoregulation
27. Tissue Integrity
28. Violence

Select evidence based research to improve the client's outcomes.

Choose effective strategies to communicate, including computer based charting, with clients and other members of the health care team.

Manage the complex adult client and to promote individualized client outcomes using the nursing process and standards of care.

Illustrate an understanding of culturally competent care using the professional nursing values of legal, ethical and caring behaviors for the adult client.

Categorize effective strategies to collaborate with other members of the health care team to provide quality care and maintain client safety, while reducing the risk of harm to the client.

Demonstrate critical thinking and clinical reasoning to make sound clinical judgments in situations characterized by ambiguity and uncertainty. *

Demonstrate advocacy for the adult client with complex needs to facilitate the client's autonomy and full partnership in their care

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessments of academic achievement may include, but are not limited to skills demonstration, written assignments, research papers, case studies, multiple choice testing and hands-on clinical practice.

Grading Scale
Theory grade of 80% or better and a satisfactory grade in clinical.

Course grading scale:

- 97-100 = A+
- 94-96 = A
- 92-93 = A-
- 88-91 = B+
- 85-87 = B
- 83-84 = B-
- 81-82 = C+
- 80 = C
- 77-79 = C-
- 74-76 = D+
- 72-73 = D
- 70-71 = D-
- 69 and below = E

Course Clinical Grade: S = Satisfactory and U = Unsatisfactory

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for NSG 209

NSG212 - Professional Transitions

Overview

Subject
Nursing

Academic Department
Nursing

School
Health & Human Services

Course Description
Continues to examine the role of the professional nurse within today's health care environment. Presents how to use previously developed critical thinking skills, in a systematic, problem solving way, as a framework for providing safe and effective care within this environment. Focuses on how to effectively and efficiently transition into the role of entry-level Associate Degree Registered Nurse and the development of professional identity.

Course Pre-requisite(s)
NSG202 Medical-Surgical Nursing III, NSG217 Pediatric Nursing, and NSG218 Women's Hlth & Maternity Care with minimum grade of C.

Course Co-requisite(s)
NSG209 Medical-Surgical Nursing IV or Nursing Department permission.

Credit Hours
1

Total Contact Hours
Total Instructor Contact Hours:
16

Total Student Contact Hours:
16

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Caring
2. Clinical Decision Making
3. Communication
4. Culture
5. Diversity
6. Evidence Based Practice
7. Health
8. Illness
9. Safety
10. Wellness
11. Advocacy
12. Collaboration
13. Ethics
14. Health Care Systems
15. Health Policy
16. Informatics
17. Leadership and Management
18. Legal
19. Professionalism
20. Quality Improvement

Select evidence based research to improve system outcomes within health care environment.
Choose effective strategies to communicate and collaborate with members of the health care team including the use of technology and informatics in the delivery of safe and effective care.
Analyze the nursing process and standards of care as applied to the health care system.
Illustrate an understanding of culturally competent care using the professional nursing values of legal, ethical and caring behaviors within the health care system.
Demonstrate critical thinking and clinical reasoning to make sound clinical judgments in situations characterized by ambiguity and uncertainty.
Explore the role of the advocate for the adult client within the health care system to facilitate the client's autonomy and full partnership in care.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessments of academic achievement may include, but are not limited to discussion forums, written assignments, research papers, case studies, and multiple choice testing.

Grading Scale
Theory grade of 80% or better.

Course grading scale:

- 97-100 = A+
- 94-96 = A
- 92-93 = A-
- 88-91 = B+
- 85-87 = B
- 83-84 = B-
- 81-82 = C+
- 80 = C
- 77-79 = C-

- 74-76 = D+
- 72-73 = D
- 70-71 = D-
- 69 and below = E

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for NSG 212

NSG217 - Pediatric Nursing

Overview

Subject
Nursing

Academic Department
Nursing

School
Health & Human Services

Course Description
Introduces the role of the professional nurse as the provider of care for children (from infancy to adolescence) within the context of the family environment. Discusses how to utilize critical thinking skills in a systematic, problem solving process as a framework for providing safe and effective care to restore and promote health in children and to foster growth and development. Focuses on family-centered nursing care related to the concepts of healthy children as well as children with common, acute, or chronic illness exemplars. Also covers how to research best practices and integrate theory in the care of children and families in a variety of clinical settings. This course includes supervised clinical agency/laboratory practicums. Course is comprised of a combination of theory and a clinical/lab experience per week.

Course Pre-requisite(s)
NSG119 Medical-Surgical Nursing II, NSG121 Psychiatric Mental Health Nurs with minimum grade of C.

Course Co-requisite(s)
NSG218 Women's Hlth & Maternity Care, NSG202 Medical-Surgical Nursing III or Nursing department permission.

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
77

Total Student Contact Hours:
77

Course Fee
100

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other Exam, Skilled Demonstration

Credit for Prior College Level Learning (CPCLL) Details
Skilled Demonstration Details

Pediatric Simulation demonstration, given in department-by-department faculty. Faculty will assess demonstration based on evaluation rubric. Evaluation rubric and student checklist located in The School of Health and Human Services office. Student must pass the graded rubric with an 80% or higher with the maximum number of attempts: two. Students must also take an exam.

Goals, Topics, and Objectives

Core Course Topics

1. Caring
2. Clinical Decision Making
3. Communication
4. Culture
5. Diversity
6. Evidence Based Practice
7. Health
8. Illness
9. Safety
10. Wellness
11. Cellular Regulation
12. Cognition
13. Collaboration
14. Development
15. Elimination
16. Ethics
17. Family Dynamics
18. Grief
19. Immunity
20. Infection
21. Intracranial Regulation
22. Legal
23. Metabolism
24. Oxygenation
25. Patient Education
26. Perfusion
27. Professionalism
28. Stress and Coping
29. Violence

Interpret and evaluate evidence based research to improve health and wellness outcomes for children, families and communities.
Utilize effective strategies to communicate with children and their families as well as other members of the health care team.
Apply the nursing process and standards of care to safely manage care for ill or injured children and to promote wellness and accident prevention during development.
Recognize cultural diversity using the professional nursing values of legal, ethical and caring behaviors for the pediatric client and the effects of cultural diversity on development.
Implement effective strategies to collaborate with other members of the health care team to provide quality care and maintain client safety, while reducing the risk of harm to the pediatric client.

Utilize examples of critical thinking and clinical reasoning to make sound clinical judgments.

Evaluate age appropriate developmental milestones that serve as major markers for emergence of motor, social, cognitive, and language skills.

Explain the nurse's role in advocacy for the child and their families assisting to facilitate the family's autonomy and full partnership in their care.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessments of academic achievement may include, but are not limited to skills demonstration, written assignments, research papers, case studies, multiple choice testing and hands-on clinical practice.

Grading Scale
Theory grade of 80% or better and a satisfactory grade in clinical.

Course grading scale:

- 97-100 = A+
- 94-96 = A
- 92-93 = A-
- 88-91 = B+
- 85-87 = B
- 83-84 = B-
- 81-82 = C+
- 80 = C
- 77-79 = C-
- 74-76 = D+
- 72-73 = D
- 70-71 = D-
- 69 and below = E

Course Clinical Grade: S = Satisfactory and U = Unsatisfactory

Texts
To be determined by department faculty

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for NSG 217

NSG218 - Women's Health & Maternity Care

Overview

Subject
Nursing

Academic Department
Nursing

School
Health & Human Services

Course Description
Introduces the role of the professional nurse as the provider of care for women and their families throughout childbearing and beyond. Addresses health issues within the context of the family environment while recognizing female maturational milestones and discusses how to utilize critical thinking skills, in a systematic, problem solving process, as a framework for providing safe and effective care. Focuses on relationship-based, family-centered nursing that promotes health and manages illness when caring for the childbearing woman and her family. Coursework also discusses how to research best practices and integrate theory in the care of women from adolescence beyond menopause, with an emphasis on maternity care. This course is comprised of a combination of theory and a clinical/lab experience per week.

Course Pre-requisite(s)
NSG119 Medical-Surgical Nursing II, NSG121 Psychiatric Mental Health Nurs with minimum grade of C.

Course Co-requisite(s)
NSG117 Medical-Surgical Nursing I, NSG202 Medical-Surgical Nursing III or Nursing department permission.

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
77

Total Student Contact Hours:
77

Course Fee
100

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other Exam, Skilled Demonstration

Credit for Prior College Level Learning (CPCLL) Details
Minimum Score on Other Exam

900 or higher

Other Exam Details

Maternity HESI exam. Maximum number of attempts for HESI exam is two. Students must also perform a maternity simulation demonstration.

Skilled Demonstration Details

Maternity Simulation demonstration, given in department-by-department faculty. Faculty will assess demonstration based on evaluation rubric. Evaluation rubric and student checklist located in Department Office. Student must pass the graded rubric with an 80% or higher with the maximum number of attempts: two. Students must also take an exam.

Goals, Topics, and Objectives

Core Course Topics

1. Caring
2. Clinical Decision Making
3. Communication
4. Culture
5. diversity
6. Evidence Based Practice
7. Health
8. Illness
9. Safety
10. Wellness
11. Advocacy
12. Cellular regulation
13. Collaboration
14. Comfort
15. Development
16. Ethics
17. Family Dynamics
18. Infection
19. Legal
20. Oxygenation
21. Perfusion
22. Tissue Integrity
23. Reproduction
24. Self
25. Sexuality
26. Spirituality
27. Thermoregulation
28. Violence

Evaluate evidence based research to improve health/wellness and illness outcomes for women, families and communities.

Illustrate effective strategies to communicate with women and their families as well as other members of the health care team.

Apply the nursing process and standards of care to safely manage women's health, maternity and newborn care.

Plan care to promote wellness and safety for the woman throughout the lifespan and the newborn.

Identify client's unique needs related to their cultural diversity and demonstrates caring behaviors when adapting nursing care for the woman and her family.

Distinguish unique legal and ethical issues and implications for care when dealing with this population.

Choose effective strategies to collaborate with other members of the health care team to provide quality care and maintain client safety, while reducing the risk of harm.

Employ critical thinking and clinical reasoning to make sound clinical judgments when caring for the woman, her newborn(s) and her family.

Analyze the nurse's role in advocacy for the woman, the fetus, the newborn, and families.

Support families' autonomy to facilitate their full partnership throughout care.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessments of academic achievement may include, but are not limited to skills demonstration, written assignments, research papers, case studies, multiple choice testing and hands-on clinical practice.

Grading Scale
Theory grade of 80% or better and a satisfactory clinical grade.

Course grading scale:

- 97-100 = A+
- 94-96 = A
- 92-93 = A-
- 88-91 = B+
- 85-87 = B
- 83-84 = B-
- 81-82 = C+
- 80 = C
- 77-79 = C-
- 74-76 = D+
- 72-73 = D
- 70-71 = D-
- 69 and below = E

Course Clinical Grade: S = Satisfactory and U = Unsatisfactory

Texts
To be determined by program faculty.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for NSG 218

NSG285 - Pathophysiology for Nurses

Overview

Subject
Nursing

Academic Department
Nursing

School
Health & Human Services

Course Description
Enhances basic knowledge and understanding of human diseases. Reviews the etiology and the pathogeneses of diseases using the system approach. Also reviews etiology, risk factors, long term effects, and prognosis of commonly occurring health issues.

Course Pre-requisite(s)
BIO233 Anatomy and Physiology I and BIO234 Anatomy and Physiology II, or the equivalent with a "C" grade or better. Students waiting to enter the nursing program or those who are currently in a BSN completion program.

Credit Hours
4

Total Contact Hours

Total Instructor Contact Hours:
62

Total Student Contact Hours:
62

Course Fee
50

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Review of human disease including Immunity, Cellular Function & Dysfunction, Respiratory, Cardiovascular, Renal, Musculoskeletal, Integumentary, Reproductive, Gastrointestinal, Endocrine and Nervous Systems.
2. Review normal and abnormal anatomy, physiology, and pathophysiology.
3. Commonly prescribed classifications of medication.
4. Defense mechanisms, adaptation, and genetic influences of diseases.
5. Signs and symptoms of diseases.
6. Diagnostic laboratory tests and their relevance to diagnosis of the disorder or disease.
7. Problems and Responses of Immune Response, Cellular Function & Dysfunction, Respiratory, Cardiovascular and Renal; to include normal anatomy and physiology as it relates to the disease process
8. Problems and Responses of Musculoskeletal, Integumentary, Reproductive, Gastrointestinal, Endocrine and Nervous Systems; to include normal anatomy and physiology as it relates to the disease process.

Demonstrate enhanced critical thinking skills necessary for care of the adult with commonly occurring medical, and surgical health problems using the systems approach.

Explain pathophysiological factors that affect health and ability to care for self.

Identify diagnostic tests and common interventions necessary to care for patients.

Review commonly prescribed medications used to treat disorders.

Discuss primary, secondary, and tertiary health care systems. Review of disease prevention is incorporated into the course.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessments of academic achievement may include, but are not limited to written assignments, research papers, case studies and multiple-choice question style testing.
Grading Scale
Theory Grade of 80% or better required for passing the course.

Students grades will be assigned using the following scale:

- 97-100 = A+
- 94-96 = A
- 92-93 = A-
- 88-91 = B+
- 85-87 = B
- 83-84 = B-
- 81-82 = C+
- 80 = C
- 77-79 = C-
- 74-76 = D+
- 72-73 = D
- 70-71 = D-
- 69 and below = E
- Course Clinical Grade: S= Satisfactory and U = Unsatisfactory

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for NSG 285

OPT101 - Introduction to Ophthalmic Technology

Overview

Subject
Ophthalmic Technician

Academic Department
Health, Education, and Human Services

School
Health & Human Services

Course Description
Introduces the roles and responsibilities of health care professionals directly involved in vision care. Provides an overview of the comprehensive medical eye examination, including documentation protocol, units on ophthalmic terminology, and abbreviations. Also discusses career options and key elements of medical ethics for ophthalmic medical personnel.

Course Pre-requisite(s)
Acceptance into the Ophthalmic Technician Program, BIO134 Essentials Anatomy&Physiology or both BIO233 Anatomy and Physiology I and BIO234 Anatomy and Physiology II all with a C or higher.

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
25

Academic Level
Undergraduate

Goals, Topics, and Objectives

Course Goals
At the conclusion of this course, the student should be able to effectively explain the career of ophthalmic technology and list the job duties performed by ophthalmic medical personnel.

Core Course Topics

1. Certification of Allied Health Personnel in Ophthalmology
2. Medical Ethics for Ophthalmic Medical Personnel
3. Ophthalmic Practice Management and Coding
4. International Sight Preservation Efforts and Ophthalmic Medical Personnel
5. Comprehensive Medical Eye Examination
6. Visual Acuity Examination
7. Color Vision Assessment
8. Screening Pupils and Peripheral Vision
9. Ocular Alignment and Binocular Vision
10. Biomicroscopy and Anterior Chamber Evaluation
11. Intraocular Pressure and Tonometry
12. Emergency Appointments

Compare medical, societal, and political factors that contribute to professional career development in ophthalmic medical assisting.
Describe guidelines and requirements for certification of ophthalmic medical personnel in North America.
Analyze ethical and legal issues relevant to vision care.
Recognize and use ophthalmic terminology and abbreviations.
Describe the elements of professional telephone etiquette.
Describe the elements of triaging ocular emergencies over the telephone.
Describe a protocol for performing basic visual assessments.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of academic achievement will include quizzes, unit examinations, and written assignments.

General Course Requirements and Recommendations

- Instructors (or their designees) reserve the right to require students to provide proper picture identification for test taking, graded papers or projects or other appropriate purposes.
- HFC Policy on Academic Dishonesty (Cheating) will be followed in this course.

Grading Scale
Student grades will be assigned using the following scale:

- 97-100 = A+
- 94-96 = A
- 92-93 = A-
- 88-91 = B+
- 85-87 = B
- 83-84 = B-
- 81-82 = C+
- 80 = C
- 77-79 = C-
- 74-76 = D+
- 72-73 = D
- 70-71 = D-
- < 69% and below = E

Texts
Required Textbooks to be determined by program faculty approval.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for OPT 101

OPT134 - Ocular Anatomy and Pathology

Overview

Subject
Ophthalmic Technician

Academic Department
Health, Education, and Human Services

School
Health & Human Services

Course Description
Focuses on the structures and functions of the eye and orbit. Explains the clinical manifestations of select pathophysiologic conditions of the eye specific to ophthalmic technology.

Course Pre-requisite(s)
Acceptance into the Ophthalmic Technician Program and BIO134 Essentials Anatomy&Physiology or both BIO233 Anatomy and Physiology I and BIO234 Anatomy and Physiology II all with a C grade or higher.

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
25

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Topography of the Eye and Orbit
2. Embryology of the Eye
3. Blood Supply to the Eye and Orbit
4. External Adnexa
5. Lacrimal System
6. The Globe
7. Extraocular Muscles
8. Visual Pathway
9. Binocular Function
10. Strabismus
11. Ocular Disorders and Systemic Disease

Identify orbital contents, shape, bones, and openings.
Describe blood supply to the orbit.
Identify nerves found in the orbit.
Describe layers, glands, and function of the eyelids.
Identify origins, insertions, and actions of extraocular muscles.
Describe structures contained within the globe.
Describe aqueous humor dynamics.
Trace the blood supply to and drainage from the eye and orbit.
Compare differences between rods and cones.
Describe the anatomy of the sensory visual pathway.
List primary causes of blindness in the United States.
Describe the common sequence of visual field loss in glaucoma.
Differentiate between selected examples of ocular infectious or inflammatory disorders.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of academic achievement will include quizzes, unit examinations, and written assignments,

General Course Requirements and Recommendations

- Instructors (or their designees) reserve the right to require students to provide proper picture identification for test taking, graded papers or projects or other appropriate purposes.

Grading Scale
Student grades will be assigned using the following scale:

- 97-100 = A+
- 94-96 = A
- 92-93 = A-
- 88-91 = B+
- 85-87 = B
- 83-84 = B-
- 81-82 = C+
- 80 = C
- 77-79 = C-
- 74-76 = D+
- 72-73 = D
- 70-71 = D-
- < 69% and below = E

Texts
Required textbooks to be determined by program faculty.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for OPT 134

OPT150 - Applied Ophthalmic Optics

Overview

Subject
Ophthalmic Technician

Academic Department
Health, Education, and Human Services

School
Health & Human Services

Course Description
Studies the fundamental optical principles including the electromagnetic spectrum, properties of light as waves and particles, geometric optics, and object-image relationships. Develops the clinical applications of optical principles.

Course Pre-requisite(s)
OPT101 Intro to Ophthalmic Technology, OPT134 Ocular Anatomy and Pathology

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
75

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Basic Optical Math
2. Physical Optics
3. Geometric Optics
4. Stigmatic and Astigmatic Imagry
5. Physiological Optics
6. Principles of Opticianry
7. Applied Optics, Selected Topics

Discuss the nature and properties of light.

Compute vergence and thin lens equations.

Analyze the relationship between accommodation and any refractive error.

Interpret and transpose a spectacle prescription.

Measure spectacle frame data.

Analyze properties of ophthalmic lenses.

Analyze optical prism power and base direction.

Apply optical principles to ophthalmic clinical problems.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of academic achievement will include quizzes, unit examinations, and written assignments,

General Course Requirements and Recommendations

- Instructors (or their designees) reserve the right to require students to provide proper picture identification for test taking, graded papers or projects or other appropriate purposes.
- HFC Policy on Academic Dishonesty (Cheating) will be followed in this course.

Grading Scale
Student grades will be assigned using the following scale:

- 97-100 = A+
- 94-96 = A
- 92-93 = A-
- 88-91 = B+
- 85-87 = B
- 83-84 = B-
- 81-82 = C+
- 80 = C
- 77-79 = C-
- 74-76 = D+
- 72-73 = D
- 70-71 = D-
- < 69% and below = E

Texts
Textbook(s) to be determined by program faculty.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for OPT 150

OPT160 - Ocular Measurements I

Overview

Subject
Ophthalmic Technician

Academic Department
Health, Education, and Human Services

School
Health & Human Services

Course Description
Discusses basic ophthalmic equipment and measurement protocol, instrument calibration, maintenance, and infection control. Students apply concepts to specific clinical situations related to vision care.

Course Pre-requisite(s)
OPT101 Intro to Ophthalmic Technology, OPT134 Ocular Anatomy and Pathology

Credit Hours
5

Total Contact Hours

Total Instructor Contact Hours:
77

Total Student Contact Hours:
77

Course Fee
75

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Techniques in Biomicroscopy
2. Intraocular Pressure Assessment
3. Instruments and Protocol for Visual Acuity Assessment
4. Visual Field Testing
5. Instruments for Analyzing Spectacle Prescriptions
6. General Instrument Maintenance and Infection Control
7. Instruments and Protocol for Contact Lens Fitting
8. Instruments and Protocol for Binocular Function
9. Instruments and Protocol for Assisting in Minor Surgery

Describe infection control procedures for ophthalmic instruments.

Explain methods to clean and sterilize surgical instruments.

Demonstrate calibration and maintenance procedures for ophthalmic instruments.

Apply ocular dressings and shields.

Measure and record distance and near vision.

Measure interpupillary distance for far and near.

Measure spectacle and contact lens power.

Perform screening tests of stereo vision.

Perform screening tests of color vision.

Perform measurements of ocular alignment.

Perform manual and automated measurement of peripheral vision.

Perform applanation tonometry with a schematic eye.

Analyze protocol for performing screening assessments.

Develop a strategy to assess subnormal acuity.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of academic achievement will include unit examinations, and written assignments.

General Course Requirements and Recommendations

- Instructors (or their designees) reserve the right to require students to provide proper picture identification for test taking, graded papers or projects or other appropriate purposes.

Grading Scale
Student grades will be assigned using the following scale:

- 97-100 = A+
- 94-96 = A
- 92-93 = A-
- 88-91 = B+
- 85-87 = B

- 83-84 = B-
- 81-82 = C+
- 80 = C
- 77-79 = C-
- 74-76 = D+
- 72-73 = D
- 70-71 = D-
- < 69% and below = E

Texts
Required textbooks to be determined by the program faculty.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for OPT 160

OPT161 - Ocular Measurements

Overview

Subject
Ophthalmic Technician

Academic Department
Health, Education, and Human Services

School
Health & Human Services

Course Description
Discusses basic ophthalmic equipment and measurement protocol, instrument calibration, maintenance, and infection control. Students apply concepts to specific clinical situations related to vision care.

Course Pre-requisite(s)
OPT101 Intro to Ophthalmic Technology, OPT134 Ocular Anatomy and Pathology

Credit Hours
4

Total Contact Hours
Total Instructor Contact Hours:
77

Total Student Contact Hours:
77

Course Fee
75

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Techniques in Biomicroscopy
2. Intraocular Pressure Assessment
3. Instruments and Protocol for Visual Acuity Assessment
4. Visual Field Testing
5. Instruments for Analyzing Spectacle Prescriptions
6. General Instrument Maintenance and Infection Control
7. Instruments and Protocol for Contact Lens Fitting
8. Instruments and Protocol for Binocular Function
9. Instruments and Protocol for Assisting in Minor Surgery

Describe infection control procedures for ophthalmic instruments.
Explain methods to clean and sterilize surgical instruments.
Demonstrate calibration and maintenance procedures for ophthalmic instruments.
Apply ocular dressings and shields.
Measure and record distance and near vision.
Measure interpupillary distance for far and near.
Measure spectacle and contact lens power.
Perform screening tests of stereo vision.
Perform screening tests of color vision.
Perform measurements of ocular alignment.
Perform manual and automated measurement of peripheral vision.
Perform applanation tonometry with a schematic eye.
Analyze protocol for performing screening assessments.
Develop a strategy to assess subnormal acuity.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of academic achievement will include unit examinations, and written assignments.
General Course Requirements and Recommendations

- Instructors (or their designees) reserve the right to require students to provide proper picture identification for test taking, graded papers or projects or other appropriate purposes.

Grading Scale
Student grades will be assigned using the following scale:

- 97-100 = A+
- 94-96 = A
- 92-93 = A-
- 88-91 = B+
- 85-87 = B
- 83-84 = B-

- 81-82 = C+
- 80 = C
- 77-79 = C-
- 74-76 = D+
- 72-73 = D
- 70-71 = D-
- < 69% and below = E

Texts
Required textbooks to be determined by the program faculty.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for OPT 161

OPT180 - Ocular Measurements II

Overview

Subject
Ophthalmic Technician

Academic Department
Health, Education, and Human Services

School
Health & Human Services

Course Description
Offers an overview of special tests and procedures ordered for subspecialty services such as cornea and external disease, glaucoma, neuro-ophthalmology, oculoplastics, pediatric ophthalmology, and retina. Presents a decision-making approach to the process of data collection. Emphasizes designing an appropriate examination strategy based upon the type of problem presented.

Course Pre-requisite(s)
OPT150 Applied Ophthalmic Optics, OPT160 Ocular Measurements I

Credit Hours
5

Total Contact Hours
Total Instructor Contact Hours:
77

Total Student Contact Hours:
77

Course Fee
25

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics
1. Introduction to Refractometry
2. General Clinical Protocol
3. Cornea Clinical Protocol
4. Oculoplastic Clinical Protocol
5. Glaucoma Clinical Protocol
6. Pediatric Clinical Protocol
7. Vitreoretinal Clinical Protocol
8. Neuro-ophthalmology Clinical Protocol
9. Ocular Medications

Identify strategies used to evaluate clinical cases.
Formulate and deliver a patient presentation.
Demonstrate competency performing basic assessments.
Develop the examination protocol based on the type of problem presented for General Clinical Protocol.
Develop the examination protocol based on the type of problem presented for Cornea Clinical Protocol.
Develop the examination protocol based on the type of problem presented for Oculoplastic Clinical Protocol.
Develop the examination protocol based on the type of problem presented for Glaucoma Clinical Protocol.
Develop the examination protocol based on the type of problem presented for Pediatric Clinical Protocol.
Develop the examination protocol based on the type of problem presented for Vitreoretinal Clinical Protocol.
Develop the examination protocol based on the type of problem presented for Neuro-ophthalmology Clinical Protocol.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of academic achievement will include tests, quizzes, and assignments.
General Course Requirements and Recommendations
- Instructors (or their designees) reserve the right to require students to provide proper picture identification for test taking, graded papers or projects or other appropriate purposes.

Grading Scale
Student grades will be assigned using the following scale:

- 97-100 = A+
- 94-96 = A
- 92-93 = A-
- 88-91 = B+
- 85-87 = B
- 83-84 = B-
- 81-82 = C+
- 80 = C
- 77-79 = C-
- 74-76 = D+
- 72-73 = D

- 70-71 = D-
- < 69% and below = E

Texts
Textbooks determined by the program faculty.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for OPT 180

OPT200 - Clinical Optical Procedures

Overview

Subject
Ophthalmic Technician

Academic Department
Health, Education, and Human Services

School
Health & Human Services

Course Description
Focuses on the physiology of image formation and refractive errors, optical calculations involving use of the retinoscope, phoropter, trial lenses and trial frame, accommodation rulers, and instruments used in evaluating contact lenses.

Course Pre-requisite(s)
OPT180 Ocular Measurements II

Credit Hours
5

Total Contact Hours

Total Instructor Contact Hours:
77

Total Student Contact Hours:
77

Course Fee
25

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Basic Concepts in Retinoscopy
2. Neutralizing Spherical Errors
3. Neutralizing Astigmatic Errors
4. Refining Astigmatic Errors
5. Accommodation and Presbyopia
6. Strabismus and Anisometropia
7. Medical Problems and Refractive Errors
8. Pre-Fit Evaluation for Contact Lenses
9. Soft vs. Rigid Contact Lenses
10. Contact Lens Verification and Care
11. Contact Lens Management
12. Case Studies in Contact Lens Troubleshooting

Discuss physiology of image formation.
Classify tools for measuring refractive errors.
Distinguish static from dynamic refractive errors.
Neutralize retinal reflexes.
Detect an astigmatic retinal reflex with a retinoscope.
Modify results to account for vertex distance.
Analyze appropriateness of measurement technique.
Measure accommodation.
Identify a correct contact lens fit.
Assess contact lens parameters.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of academic achievement will include quizzes, unit examinations, and written assignments.

General Course Requirements and Recommendations
Instructors (or their designees) reserve the right to require students to provide proper picture identification for test taking, graded papers or projects or other appropriate purposes.

Grading Scale
Student grades will be assigned using the following scale:

- 97-100 = A+
- 94-96 = A
- 92-93 = A-
- 88-91 = B+
- 85-87 = B
- 83-84 = B-
- 81-82 = C+
- 80 = C
- 77-79 = C-
- 74-76 = D+
- 72-73 = D
- 70-71 = D-

Texts • < 69% and below = E
Textbooks to be determined by the program faculty.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for OPT 200

OPT202 - Optical Clinical Procedures

Overview

Subject
Ophthalmic Technician

Academic Department
Health, Education, and Human Services

School
Health & Human Services

Course Description
Focuses on the physiology of image formation and refractive errors, optical calculations involving use of the retinoscope, phoropter, trial lenses and trial frame, accommodation rulers, and instruments used in evaluating contact lenses.

Course Pre-requisite(s)
OPT180 Ocular Measurements II

Credit Hours
4

Total Contact Hours
Total Instructor Contact Hours:
77

Total Student Contact Hours:
77

Course Fee
25

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Basic Concepts in Retinoscopy
2. Neutralizing Spherical Errors
3. Neutralizing Astigmatic Errors
4. Refining Astigmatic Errors
5. Accommodation and Presbyopia
6. Strabismus and Anisometropia
7. Medical Problems and Refractive Errors
8. Pre-Fit Evaluation for Contact Lenses
9. Soft vs. Rigid Contact Lenses
10. Contact Lens Verification and Care
11. Contact Lens Management
12. Case Studies in Contact Lens Troubleshooting

Discuss physiology of image formation.
Classify tools for measuring refractive errors.
Distinguish static from dynamic refractive errors.
Neutralize retinal reflexes.
Detect an astigmatic retinal reflex with a retinoscope.
Modify results to account for vertex distance.
Analyze appropriateness of measurement technique.
Measure accommodation.
Identify a correct contact lens fit.
Assess contact lens parameters.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of academic achievement will include quizzes, unit examinations, and written assignments.

General Course Requirements and Recommendations
Instructors (or their designees) reserve the right to require students to provide proper picture identification for test taking, graded papers or projects or other appropriate purposes.

Grading Scale
Student grades will be assigned using the following scale:

A+ = 97-100%
A = 94-96%
A- = 92-93%
B+ = 88-91%
B = 85-87%
B- = 83-84%
C+ = 81-82%
C = 80%
C- = 77-79%
D+ = 74-76%
D = 72-73%
D- = 70-71%
E < 69% and below

Texts
Textbooks to be determined by the program faculty.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for OPT 202

OPT220 - Ophthalmic Photography

Overview

Subject
Ophthalmic Technician

Academic Department
Health, Education, and Human Services

School
Health & Human Services

Course Description
Introduces imaging procedures for external and internal ocular structures, including slit lamp and fundus photography, fluorescein angiography, optical coherence tomography, and other relevant imaging techniques.

Course Pre-requisite(s)
OPT202 Optical Clinical Procedures, OPT290 Clinical Externship I

Credit Hours
2

Total Contact Hours
Total Instructor Contact Hours:
32

Total Student Contact Hours:
32

Course Fee
25

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. The Camera – Basic Photographic Principles
2. The Eye – Review of Ocular Anatomy
3. Patient, Data, and Image Management
4. Ophthalmic Pharmacology
5. Film and Digital Photography
6. Fundus Photography
7. Fluorescein Angiography
8. Indocyanine Green Angiography
9. Optical Coherence Tomography
10. Slit Lamp Photography
11. Specular Microscopy

Describe the function and components of 35 mm and digital camera systems and image acquisition equipment.
Explain patient preparation for selected imaging modalities.
Describe techniques of ocular image production.
Recognize possible complications of intravenous dyes.
Identify phases of circulation in fluorescein angiography.
Recognize sources of imaging artifacts.
Select appropriate scanning and data analysis protocols for the ocular condition.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of academic achievement will include quizzes, examinations (mid-term/final), and written assignments.

General Course Requirements and Recommendations

- Instructors (or their designees) reserve the right to require students to provide proper picture identification for test taking, graded papers or projects or other appropriate purposes.
- HFC Policy on Academic Dishonesty (Cheating) will be followed in this course.

Grading Scale
Student grades will be assigned using the following scale::

- 97-100 = A+
- 94-96 = A
- 92-93 = A-
- 88-91 = B+
- 85-87 = B
- 83-84 = B-
- 81-82 = C+
- 80 = C
- 77-79 = C-
- 74-76 = D+
- 72-73 = D
- 70-71 = D-
- < 69% and below = E

Texts
Textbooks be determined by the program faculty.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for OPT 220

OPT240 - Ophthalmic Surgical Assisting

Overview

Subject
Ophthalmic Technician

Academic Department
Health, Education, and Human Services

School
Health & Human Services

Course Description
Introduces ophthalmic surgical procedures, including the indications, goals, and steps of select ophthalmic procedures. Emphasizes principles of asepsis, and care and maintenance of ophthalmic surgical instruments.

Course Pre-requisite(s)
OPT200 Clinical Optical Procedures, OPT290 Clinical Externship I

Credit Hours
2

Total Contact Hours
Total Instructor Contact Hours:
32

Total Student Contact Hours:
32

Course Fee
40

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Instrumentation & Preoperative Preparation and Orders
2. Ophthalmic Anesthesia and Surgical Preparation
3. Patient Instructions for Postoperative Care
4. Anterior Chamber Paracentesis and History of Intraocular Lens Development
5. Phacoemulsification / Posterior Chamber Intraocular Lens Implantation
6. Extracapsular vs Intracapsular Cataract Extraction
7. Penetrating Keratoplasty and Pterygium Excision
8. Refractive Surgery
9. Eye Trauma
10. Glaucoma Surgery
11. Pediatrics and Strabismus
12. Oculoplastic Surgery
13. Vitreoretinal Surgery

Explain indications for selected ocular surgical procedures.
Discuss standards of care for the preoperative patient.
Select instruments for common ocular surgical procedures.
Describe a sequence of events in selected surgical cases.
Identify classifications of medications utilized for ocular surgery.
Discuss complications of common ocular surgical procedures.
Create a tool for patient education and surgical counseling.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of academic achievement will include quizzes, examinations (mid-term/final), and written assignments.

General Course Requirements and Recommendations

- Instructors (or their designees) reserve the right to require students to provide proper picture identification for test taking, graded papers or projects or other appropriate purposes.

Grading Scale
Student grades will be assigned using the following scale:

- 97-100 = A+
- 94-96 = A
- 92-93 = A-
- 88-91 = B+
- 85-87 = B
- 83-84 = B-
- 81-82 = C+
- 80 = C
- 77-79 = C-
- 74-76 = D+
- 72-73 = D
- 70-71 = D-
- < 69% and below = E

Texts
Textbooks to be determined by program faculty.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for OPT 240

OPT250 - Ophthalmic Surgical Assisting Curr Issue

Overview

Subject
Ophthalmic Technician

Academic Department
Health, Education, and Human Services

School
Health & Human Services

Course Description
Introduces ophthalmic surgical procedures, including the indications, goals, and steps of select ophthalmic procedures. Emphasizes principles of asepsis, and care and maintenance of ophthalmic surgical instruments. Also, explores issues and trends in healthcare delivery, including certification requirements and systematic review for the national certification examination for ophthalmic technicians.

Course Pre-requisite(s)
OPT202 Optical Clinical Procedures, OPT290 Clinical Externship I

Credit Hours
2

Total Contact Hours
Total Instructor Contact Hours:
32

Total Student Contact Hours:
32

Course Fee
65

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Instrumentation & Preoperative Preparation and Orders
2. Ophthalmic Anesthesia and Surgical Preparation
3. Patient Instructions for Postoperative Care
4. Anterior Chamber Paracentesis and History of Intraocular Lens Development
5. Phacoemulsification / Posterior Chamber Intraocular Lens Implantation
6. Extracapsular vs Intracapsular Cataract Extraction
7. Penetrating Keratoplasty and Pterygium Excision
8. Refractive Surgery
9. Eye Trauma
10. Glaucoma Surgery
11. Pediatrics and Strabismus
12. Oculoplastic Surgery
13. Vitreoretinal Surgery
14. Clinical Competency in Ophthalmic Technology
15. Current Trends in Ophthalmic Healthcare
16. JCAHPO Certification and Application
17. Service Learning Project

Explain indications for selected ocular surgical procedures.
Explain how to measure and record axial length (A scan).
Describe contact and immersion techniques.
Describe how to calculate and record intraocular lens power.
Discuss standards of care for the preoperative patient.
Select instruments for common ocular surgical procedures.
Describe a sequence of events in selected surgical cases.
Identify classifications of medications utilized for ocular surgery.
Discuss complications of common ocular surgical procedures.
Create a tool for patient education and surgical counseling.
Identify current trends in ophthalmic healthcare delivery and emerging job markets for ophthalmic personnel.
Compare the technicians to physicians role in providing technical care as benchmarked by Preferred Practice Pattern guidelines of the American Academy of Ophthalmology.
Attain passing scores on all content areas for national certification exam.
Demonstrate essential knowledge, skills, and attitudes that correlate with performance as an ophthalmic technician.
Plan and implement a service-learning project.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of academic achievement will include quizzes, examinations, written assignments, case presentations, and skill assessments.

General Course Requirements and Recommendations

- Instructors (or their designees) reserve the right to require students to provide proper picture identification for test taking, graded papers or projects or other appropriate purposes.
- HFC Policy on Academic Dishonesty (Cheating) will be followed in this course.

Grading Scale
Student grades will be assigned using the following scale:

- 97-100 = A+
- 94-96 = A
- 92-93 = A-
- 88-91 = B+
- 85-87 = B
- 83-84 = B-
- 81-82 = C+
- 80 = C
- 77-79 = C-
- 74-76 = D+
- 72-73 = D
- 70-71 = D-
- < 69% and below = E

Texts
Textbooks to be determined by program faculty.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for OPT 250

OPT260 - Current Issues in Vision Care

Overview

Subject
Ophthalmic Technician

Academic Department
Health, Education, and Human Services

School
Health & Human Services

Course Description
Explores issues and trends in healthcare delivery, including certification requirements and systematic review for the national certification examination for ophthalmic technicians.

Course Pre-requisite(s)
OPT220 Ophthalmic Photography, OPT240 Ophthalmic Surgical Assisting, OPT290 Clinical Externship I

Credit Hours
1

Total Contact Hours

Total Instructor Contact Hours:
16

Total Student Contact Hours:
16

Course Fee
25

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Clinical Competency in Ophthalmic Technology
2. Current Trends in Ophthalmic Healthcare
3. JCAHPO Certification and Application
4. Service Learning Project Plan
5. Service Learning Project Experience
6. Service Learning Project Report

Identify current trends in ophthalmic healthcare delivery and emerging job markets for ophthalmic personnel.

Compare the technicians to physicians role in providing technical care as benchmarked by Preferred Practice Pattern guidelines of the American Academy of Ophthalmology.

Attain passing scores on all content areas for national certification exam.

Demonstrate essential knowledge, skills, and attitudes that correlate with performance as an ophthalmic technician.

Plan and implement a service-learning project.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of academic achievement will include unit examinations, case presentations, and skill assessments.
General Course Requirements and Recommendations

- Instructors (or their designees) reserve the right to require students to provide proper picture identification for test taking, graded papers or projects or other appropriate purposes.
- HFC Policy on Academic Dishonesty (Cheating) will be followed in this course

Grading Scale
Student grades will be assigned using the following scale:

- 97-100 = A+
- 94-96 = A
- 92-93 = A-
- 88-91 = B+
- 85-87 = B
- 83-84 = B-
- 81-82 = C+
- 80 = C
- 77-79 = C-
- 74-76 = D+
- 72-73 = D
- 70-71 = D-
- < 69% and below = E

Texts
Textbooks to be determined by program faculty.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for OPT 260

OPT290 - Clinical Externship I

Overview

Subject
Ophthalmic Technician

Academic Department
Health, Education, and Human Services

School
Health & Human Services

Course Description
Offers structured clinical experiences in which students observe and participate in selective practical activities at affiliating ophthalmology clinics. Discusses skill development in charting, communicating with patients, performing non-invasive tests, calibrating, and maintaining ophthalmic equipment typical to a standard exam room. Requires students to document 240 clinical hours.

Course Pre-requisite(s)
OPT180 Ocular Measurements II

Credit Hours
4

Total Contact Hours

Total Instructor Contact Hours:
240

Total Student Contact Hours:
240

Course Fee
125

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Administrative and Clerical Duties.
2. History Taking.
3. Communication Skills.
4. Basic Skills.
5. Color Vision.
6. Pupil Function.
7. Contact Lenses.
8. Equipment Maintenance and Repair.
9. Medical Ethics and Legal Issues.

Demonstrate professional and ethical behaviors.

Perform competently within the scope of training and education.

Obtain and document the patients medical history through oral interview and records.

Distinguish between subjective and objective components of a complete medical eye examination.

Examine a patients record and extract information pertinent to the current appointment.

Communicate appropriately in verbal and written form with patients and professional staff.

Maintain patient confidentiality.

Identify issues related to insurance and reimbursement.

Apply correct ophthalmic terminology and abbreviations to basic body structures and functions.

Administer and record specified topical medications at the direction of the physician.

Prepare examination rooms and maintain ophthalmic clinical equipment.

Perform measurements of visual acuity.

Perform lensometry of spectacle lenses.

Measure interpupillary distance and pupil size.

Measure color vision using pseudoisochromatic plates.

Perform manual and automated visual field testing.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of academic achievement will include performance during formative and summative practical examinations and clinic logs.

General Course Requirements and Recommendations

- Students will be introduced to the clinical environment and will demonstrate proficiency in obtaining medical information and performing selected clinical tasks.
- Instructors (or their designees) reserve the right to require students to provide proper picture identification for test taking, graded papers or projects or other appropriate purposes.
- Students must pass this course with a "C" or better to remain in the Ophthalmic Technician AAS Degree.

Grading Scale
Student grades will be assigned using the following scale:

- 97-100 = A+
- 94-96 = A
- 92-93 = A-
- 88-91 = B+
- 85-87 = B
- 83-84 = B-
- 81-82 = C+
- 80 = C
- 77-79 = C-
- 74-76 = D+
- 72-73 = D
- 70-71 = D-
- < 69% and below = E

Texts
Textbooks to be determined by program faculty.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for OPT 290

OPT293 - Clinical Externship II

Overview

Subject
Ophthalmic Technician

Academic Department
Health, Education, and Human Services

School
Health & Human Services

Course Description
Continues structured clinical experiences while emphasizing speed, accuracy, and clarity in advanced clinical skills. Students must document 360 clinical hours.

Course Pre-requisite(s)
OPT290 Clinical Externship I, OPT202 Optical Clinical Procedures

Credit Hours
6

Total Contact Hours
Total Instructor Contact Hours:
360

Total Student Contact Hours:
360

Course Fee
25

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Ophthalmic Microbiology
2. Ophthalmic Pharmacology
3. Ocular Motility
4. Optics / Opticianry
5. Tonometry
6. Visual Fields
7. Specialized Ophthalmic Testing

Skillfully and accurately perform clinical and diagnostic tests and patient services in conformation with the didactic curriculum.
Deccmonstrate knowledge of potential side effects of ocular medication.
Assess visual acuity in children and adults.
Perform non-contact, tonopen, and applanation Tonometry.
Measure vertex distance.
Use a slit lamp to assess ocular structures.
Demonstrate tests of ocular motility.
Perform stereopsis tests.
Identify ocular misalignments.
Measure amplitude of accommodation.
Measure the refractive state of the eye.
Complete lab requests for culturing specimens from patients with ocular problems.
Measure corneal curvature and thickness.
Measure axial length.
Identify a correct contact lens fit.
Relate tactfully and sympathetically to patients.
Consistently demonstrate reliability, self-discipline, cooperativeness, and professional deportment and demeanor in clinical activities.
Demonstrate proficiency in both written and spoken communication

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of academic achievement will include performance during formative and summative practical examinations and clinic logs.

General Course Requirements and Recommendations

- Students will build on previous patient care experiences and will demonstrate proficiency in performing more advanced clinical tasks.
- Instructors (or their designees) reserve the right to require students to provide proper picture identification for test taking, graded papers or projects or other appropriate purposes.

Grading Scale
Student grades will be assigned using the following scale:

- 97-100 = A+
- 94-96 = A
- 92-93 = A-
- 88-91 = B+
- 85-87 = B
- 83-84 = B-
- 81-82 = C+
- 80 = C
- 77-79 = C-
- 74-76 = D+
- 72-73 = D
- 70-71 = D-
- < 69% and below = E

Texts
Textbooks to be determined by program faculty.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for OPT 293

OPT295 - Ophthalmic Externship III

Overview

Subject
Ophthalmic Technician

Academic Department
Health, Education, and Human Services

School
Health & Human Services

Course Description
Continues structured clinical experiences with emphasis on gaining autonomy in performing basic procedures, while adding new experiences in digital imaging and surgical assisting. Students must document 168 clinical hours.

Course Pre-requisite(s)
OPT293 Clinical Externship II, OPT220 Ophthalmic Photography, OPT250 Ophthal Surg Asst & Curr Issue

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
168

Total Student Contact Hours:
168

Course Fee
25

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Ophthalmic Microbiology and Pharmacology
2. Ocular Motility
3. Contact Lenses
4. Optics / Opticianry
5. Tonometry
6. Visual Fields
7. Specialized Ophthalmic Testing
8. Ophthalmic Photography
9. Ophthalmic Surgical Assisting

Skillfully and accurately perform clinical and diagnostic tests and patient services in conformation with the didactic curriculum.
Identify cause and effect of the most common systemic conditions with ocular manifestations.
Select imaging technique appropriate for various ocular conditions.
Obtain clear fundus photographs.
Recognize common artifacts in digital images.
Perform tests of tear function.
Demonstrate proper gowning and gloving technique.
Perform preoperative hand scrub.
Identify sterile field and instruments for common ocular procedures.
Assist in minor ophthalmic surgery.
Clean and sterilize ophthalmic microsurgical instruments.
Assess post-operative patient acuity.
Relate tactfully and sympathetically to patients.
Consistently demonstrate reliability, self-discipline, cooperativeness, and professional deportment and demeanor in clinical activities.
Demonstrate proficiency in both written and spoken communication

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of academic achievement will include performance during formative and summative practical examinations, and clinic logs.

General Course Requirements and Recommendations
Students will build competency and confidence in performing routine clinical tasks as part of the eye care team.

Instructors (or their designees) reserve the right to require students to provide proper picture identification for test taking, graded papers or projects or other appropriate purposes.

Grading Scale
Student grades will be assigned using the following scale:

- 97-100 = A+

- 94-96 = A
- 92-93 = A-
- 88-91 = B+
- 85-87 = B
- 83-84 = B-
- 81-82 = C+
- 80 = C
- 77-79 = C-
- 74-76 = D+
- 72-73 = D
- 70-71 = D-
- < 69% and below = E

Texts
Textbooks to be determined by program faculty.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for OPT 295

OPT297 - Clinical Externship III

Overview

Subject
Ophthalmic Technician

Academic Department
Health, Education, and Human Services

School
Health & Human Services

Course Description
Continues structured clinical experiences with emphasis on gaining autonomy in performing basic procedures, while adding new experiences in digital imaging and surgical assisting. Students must document 320 clinical hours.

Course Pre-requisite(s)
OPT293 Clinical Externship II, OPT220 Ophthalmic Photography, OPT240 Ophthalmic Surgical Assisting

Credit Hours
6

Total Contact Hours
Total Instructor Contact Hours:
320

Total Student Contact Hours:
320

Course Fee
25

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Ophthalmic Microbiology and Pharmacology
2. Ocular Motility
3. Contact Lenses
4. Optics / Opticianry
5. Tonometry
6. Visual Fields
7. Specialized Ophthalmic Testing
8. Ophthalmic Photography
9. Ophthalmic Surgical Assisting

Skillfully and accurately perform clinical and diagnostic tests and patient services in conformation with the didactic curriculum.
Identify cause and effect of the most common systemic conditions with ocular manifestations.
Select imaging technique appropriate for various ocular conditions.
Obtain clear fundus photographs.
Recognize common artifacts in digital images.
Perform tests of tear function.
Demonstrate proper gowning and gloving technique.
Perform preoperative hand scrub.
Identify sterile field and instruments for common ocular procedures.
Assist in minor ophthalmic surgery.
Clean and sterilize ophthalmic microsurgical instruments.
Apply and remove eye dressings.
Assess post-operative patient acuity.
Relate tactfully and sympathetically to patients.
Consistently demonstrate reliability, self-discipline, cooperativeness, and professional deportment and demeanor in clinical activities.
Demonstrate proficiency in both written and spoken communication

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of academic achievement will include performance during formative and summative practical examinations, and clinic logs.

General Course Requirements and Recommendations
Students will build competency and confidence in performing routine clinical tasks as part of the eye care team.

Instructors (or their designees) reserve the right to require students to provide proper picture identification for test taking, graded papers or projects or other appropriate purposes.

Grading Scale
Student grades will be assigned using the following scale:

- 97-100 = A+
- 94-96 = A
- 92-93 = A-
- 88-91 = B+
- 85-87 = B
- 83-84 = B-
- 81-82 = C+
- 80 = C
- 77-79 = C-
- 74-76 = D+
- 72-73 = D
- 70-71 = D-
- < 69% and below = E

Texts
Textbooks to be determined by program faculty.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for OPT 297

PHIL130 - Introduction to Philosophy

Overview

Subject
Philosophy

Academic Department
Humanities

School
Liberal Arts

Course Description
An introduction to the perennial problems that have occupied philosophers primarily in the Western tradition, including appearance vs. reality, the mind/body problem, free will vs. determinism, the nature of morality, the existence of God, and the justification of political power.

Course Pre-requisite(s)
Eligible to take ENG courses at HFC.

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
10

Academic Level
Undergraduate

General Education Category
Humanities and Fine Arts

Michigan Transfer Agreement (MTA) Category
Category 5: Humanities and Fine Arts - Applied Degrees, Category 5: Humanities and Fine Arts - Transfer Degrees

Goals, Topics, and Objectives

Course Goals
The goal of this course is to provide students with knowledge of the major questions and problems that have arisen in the discipline of philosophy, and various attempts to answer these questions and solve these problems, and to cultivate an ability to evaluate the various arguments given by influential philosophers concerning these questions and problems.

Core Course Topics

1. Definition and branches of philosophy
2. Influential philosophers
3. Appearance vs. reality
4. Mind/body problem
5. Free will vs. determinism
6. Existence of God
7. Nature of morality
8. Nature and justification of political power

Define philosophy and its various branches.
Identify the major problems and questions that have occupied philosophers in the Western tradition (appearance vs. reality, mind/body problem, free will vs. determinism, the existence of God, nature of morality, nature and justification of political power).
Explain various attempts to solve the major problems in the Western philosophical tradition.
Evaluate the arguments given by influential philosophers and schools of thought concerning the major problems of philosophy.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
All assessment of student achievement is left to the discretion of the individual instructor. Assessment methods include but are not limited to quizzes, exams, writing assignments, and group projects.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for PHIL 130

PHIL131 - Introduction to Logic

Overview

Subject
Philosophy

Academic Department
Humanities

School
Liberal Arts

Course Description
Examines the methods and principles of assertion and validity in argumentation. Includes the study of the nature of logic and its relationship to language, informal fallacies, and both traditional and modern symbolic methods of deduction.

Course Pre-requisite(s)
Eligible to take ENG courses at HFC.

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
10

Academic Level
Undergraduate

General Education Category
Humanities and Fine Arts

Michigan Transfer Agreement (MTA) Category
Category 5: Humanities and Fine Arts - Applied Degrees, Category 5: Humanities and Fine Arts - Transfer Degrees

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
Determined by department

Goals, Topics, and Objectives

Course Goals
The goal of this course is to give the student the skills needed to think logically when they speak, listen, read, write and make decisions in life. The students will know how to recognize and avoid illogical thinking.

Core Course Topics

1. Philosophy
2. Arguments
3. Deduction/Induction
4. Language
5. Definitions
6. Categorical Statements
7. Categorical Syllogisms
8. Propositional (Symbolic) Logic
9. Truth Tables
10. Natural Deductions (Proofs)
11. Fallacies

Define philosophy and its various branches.
Identify arguments and their parts, and distinguish them from non-arguments.
Distinguish between deductive and inductive arguments.
Generate the truth values of categorical statements and the validity/ invalidity of immediate inferences using the Square of Opposition and operations such as conversion and obversion.
Translate categorical syllogisms into standard form and employ traditional methods (Venn diagrams, rules of the syllogism) to test for validity.
Translate ordinary language statements and arguments into symbolic form.
Employ truth tables and natural deductions to test/prove the validity/ invalidity of deductive arguments.
Demonstrate proficiency in detecting and avoiding a variety of fallacious arguments.
Identify types of inductive arguments and appropriate questions to determine whether they are strong or weak.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
All assessment of student achievement is left to the discretion of the individual instructor.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for PHIL 131

PHIL133 - History of Philosophy to 18th Century

Overview

Subject
Philosophy

Academic Department
Humanities

School
Liberal Arts

Course Description
Introduces the history of Western philosophy from its origins in ancient Greece to the rise of science. Includes a study of pre-Socratics, major Greek philosophers, medieval philosophy, and rationalist and empiricist philosophy of the modern era.

Course Pre-requisite(s)
Eligible to take ENG courses at HFC.

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
10

Academic Level
Undergraduate

General Education Category
Humanities and Fine Arts

Michigan Transfer Agreement (MTA) Category
Category 5: Humanities and Fine Arts - Applied Degrees, Category 5: Humanities and Fine Arts - Transfer Degrees

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
Determined by department

Goals, Topics, and Objectives

Course Goals
The goal of this course is to provide students with knowledge of the major figures in the history of philosophy, an understanding of the development of philosophical ideas over the centuries, and an awareness of the enterprise of philosophy.

Core Course Topics

1. Philosophy
2. Arguments
3. Pre-Socratics
4. Socrates
5. Plato
6. Aristotle
7. Medieval Philosophy
8. Descartes
9. Locke
10. Early Modern Rationalism
11. Early Modern Empiricism

Define "philosophy" and its various branches.

State the major questions considered by influential philosophers and schools of thought of the Ancient, Medieval, and Early Modern periods.

Explain the answers given by influential philosophers and schools of thought of the Ancient, Medieval, and Early Modern periods listed above to the major philosophical questions of their day.

Describe the philosophical method of argumentation.

Summarize the arguments given by influential philosophers and schools of thought of the Ancient, Medieval, and Early Modern periods listed above.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
All assessment of student achievement is left to the discretion of the individual instructor.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for PHIL 133

PHIL135 - History of Modern Philosophy

Overview

Subject
Philosophy

Academic Department
Humanities

School
Liberal Arts

Course Description
A continuation of the history of Western philosophy focusing on the major philosophers and major developments through the twentieth century from Descartes through Wittgenstein. Examines influential currents such as rationalism, empiricism, idealism, romanticism, Marxism, Darwinism, positivism, pragmatism, phenomenology, existentialism and analysis.

Course Pre-requisite(s)
Eligible to take ENG courses at HFC.

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
10

Academic Level
Undergraduate

General Education Category
Humanities and Fine Arts

Michigan Transfer Agreement (MTA) Category
Category 5: Humanities and Fine Arts - Applied Degrees, Category 5: Humanities and Fine Arts - Transfer Degrees

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
Determined by department

Goals, Topics, and Objectives

Course Goals
The goal of this course is to provide students with knowledge of major figures in the history of philosophy, understanding of the development of philosophical ideas over the centuries, and an awareness of the enterprise of philosophy.

Core Course Topics

1. Philosophy
2. Arguments
3. Early Modern Rationalism
4. Early Modern Empiricism
5. Kant
6. German Idealism
7. Existentialism
8. Logical Positivism
9. Late Modern Philosophy
10. Wittgenstein

Define "philosophy" and its various branches.

State the major questions considered by influential philosophers and schools of thought of the Modern period.

Explain the answers given by influential philosophers and schools of thought of the Modern period listed above to the major philosophical questions of their day.

Describe the philosophical method of argumentation.

Summarize the arguments given by influential philosophers and schools of thought of the Modern period.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
All assessment of student achievement is left to the discretion of the individual instructor.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for PHIL 135

PHIL137 - Topics in Philosophy

Overview

Subject
Philosophy

Academic Department
Humanities

School
Liberal Arts

Course Description
A non-historical approach to philosophy for serious students interested in the professions or for professionals interested in focusing on topics of professional or personal significance. Section offerings are sufficiently diverse to acquaint serious students or professionals with the extensive scope of philosophy. Diverse areas such as philosophy of religion, philosophy of science, aesthetics, philosophy of law, business ethics, biomedical ethics, philosophy of language, etc. may be the current topic offered that semester. Topics vary each semester and with each instructor.

Course Pre-requisite(s)
Eligible to take ENG courses at HFC.

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
10

Academic Level
Undergraduate

General Education Category
Humanities and Fine Arts

Michigan Transfer Agreement (MTA) Category
Category 5: Humanities and Fine Arts - Applied Degrees, Category 5: Humanities and Fine Arts - Transfer Degrees

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
Determined by department

Goals, Topics, and Objectives

Course Goals
The goal of this course is to go deeper and in more detail into specific problems in philosophy. The student will cover more original text from philosophers and develop an understanding of the complexities of philosophical reasoning.

Core Course Topics

1. Topics will vary with the specific topic covered that semester.

Define philosophy and its various branches.
Describe the issues involved in the philosophical problem.
Express the major positions taken by people in the field on this problem.
Relate various examples and real-life scenarios to the philosophical problem.
Express and evaluate arguments concerning the issues involved in the philosophical problem.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
All assessment of student achievement is left to the discretion of the individual instructor.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for PHIL 137

PHIL138 - Moral Issues in Biotechnology

Overview

Subject
Philosophy

Academic Department
Humanities

School
Liberal Arts

Course Description
Introduces moral dilemmas that arise in the context of biotechnology and the theories and skills required to engage in high quality dialogue concerning those dilemmas. Includes study of the basic nature of biotechnology and the most influential theories of ethics and justice as relates to biotechnological research and products.

Course Pre-requisite(s)
Eligible to take ENG course at HFC.

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
10

Academic Level
Undergraduate

General Education Category
Humanities and Fine Arts

Michigan Transfer Agreement (MTA) Category
Category 5: Humanities and Fine Arts - Applied Degrees, Category 5: Humanities and Fine Arts - Transfer Degrees

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
Other

Goals, Topics, and Objectives

Course Goals
The goal of this course is to provide students with a knowledge of the basics of biotechnology, an understanding of the most influential moral theories, and the practical skills involved in effectively discussing moral dilemmas in biotechnology.

Core Course Topics

1. Philosophy
2. Biotechnology
3. Arguments
4. Ethics
5. Justice
6. Dialogue

Define "philosophy" and its various branches.
Define "biotechnology" and describe various kinds.
Identify and break down arguments into parts.
Explain and question popular approaches to moral issues.
Explain the most influential ethical theories.
Explain various theories of justice.
Examine specific moral dilemmas in biotechnology and demonstrate ability to effectively discuss them with the help of the most influential theories of ethics and justice.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
All assessment of student achievement is left to the discretion of the individual instructor. Recommended assessments include quizzes, exams, and Ethics Bowl competitions.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for PHIL 138

PHIL139 - Ethics

Overview

Subject
Philosophy

Academic Department
Humanities

School
Liberal Arts

Course Description
Emphasizes practical and normative ethical questions as well as analytical or metaethical questions. Provides a systematic examination of problems by covering various classical and contemporary theories which include standards of criteria of moral action, the nature and justification of moral judgments, the nature of ethical knowledge, the meaning of ethical terms, intelligent decision-making, and free will vs determinism.

Course Pre-requisite(s)
Eligible to take ENG courses at HFC.

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
10

Academic Level
Undergraduate

General Education Category
Humanities and Fine Arts

Michigan Transfer Agreement (MTA) Category
Category 5: Humanities and Fine Arts - Applied Degrees, Category 5: Humanities and Fine Arts - Transfer Degrees

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
Determined by department

Goals, Topics, and Objectives

Course Goals
The goal of this course is to provide the student with the conceptual tools to be able to discuss and formulate ethical decisions covering the problems encountered in society, using criteria of critical thinking and objectivity.

Core Course Topics

1. Philosophy
2. Arguments
3. Descriptive Ethics/Normative Ethics/Metaethics
4. Ethical Theories
5. Applications to Ethical Problems

Define philosophy and its various branches.

Identify and explain the differences between descriptive ethics, normative ethics, and metaethics.

Identify, explain, and apply major ethical theories offered throughout the history of philosophy.

Identify deficiencies in ethical theories based on critical thinking and argumentation.

Recognize ethically important components of contemporary moral issues.

Discuss contemporary moral issues using major ethical theories offered throughout the history of philosophy.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
All assessment of student achievement is left to the discretion of the individual instructor.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for PHIL 139

PHIL201 - Eastern Philosophy

Overview

Subject
Philosophy

Academic Department
Humanities

School
Liberal Arts

Course Description
An exploration of the metaphysical, epistemological, and ethical frameworks of select philosophical traditions rooted in East Asia.

Course Pre-requisite(s)
Eligible to take ENG courses at HFC.

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
10

Academic Level
Undergraduate

General Education Category
Humanities and Fine Arts

Michigan Transfer Agreement (MTA) Category
Category 5: Humanities and Fine Arts - Applied Degrees, Category 5: Humanities and Fine Arts - Transfer Degrees

Goals, Topics, and Objectives

Course Goals
The goal of this course is to provide students with an understanding of the major views of influential philosophers from the Eastern tradition and the skills to both evaluate the quality of the arguments given by select Eastern philosophers and compare the views of Eastern philosophers with those found in the Western philosophical tradition.

Core Course Topics

1. Metaphysical, Epistemological, and Ethical Problems in Eastern Philosophy
2. Eastern Philosophers (including, but not limited to, those from the Indian Vedanta tradition, the Buddha, Lao Tzu, and Confucius) and Texts
3. Differences Between Eastern and Western Philosophies
4. Arguments of Eastern Philosophers

Identify the basic problems of Eastern philosophy in the fields of metaphysics, epistemology, and ethics.

Summarize the views of select Eastern philosophers (including, but not limited to, those from the Indian Vedanta tradition, the Buddha, Lao Tzu, and Confucius) as expressed in philosophical texts.

Compare the metaphysical, epistemological, and ethical views of select Eastern philosophers with those expressed in the Western philosophical tradition.

Evaluate the quality of the arguments given in support of the views of select Eastern philosophers.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
All assessment of student achievement is left to the discretion of the individual instructor. Assessment methods include but are not limited to quizzes, exams, writing assignments, and group projects.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for PHIL 201

PHYS131 - General Physics I

Overview

Subject
Physics

Academic Department
Physics, Astronomy, and Earth Sciences

School
Science, Tech, Engr & Math

Course Description
Introduces the principles of physics, including units on mechanics, heat, and sound. Partially fulfills the physics requirement in pre-medicine, pre-dentistry, teaching, and law. Three hours of lecture and three hours of laboratory per week.

Course Pre-requisite(s)
MATH103 Technical Mathematics or MATH112 Trigonometry or MATH165 Mathematics for Calculus or MATH175 Precalculus with a C or better or placement into MATH180 Calculus 1 on the math placement test or one-year of high-school algebra with a grade of C or better and a passing grade on the physics pretest.

Credit Hours
4

Total Contact Hours
Total Instructor Contact Hours:
92

Total Student Contact Hours:
92

Course Fee
22

Academic Level
Undergraduate

General Education Category
Natural Sciences

Michigan Transfer Agreement (MTA) Category
Category 6: Natural Sciences - Applied Degrees, Category 6: Natural Sciences - Transfer Degrees - Lecture and Lab

Goals, Topics, and Objectives

Course Goals
The goal of this course is to develop and strengthen critical thinking skills and scientific literacy through the study and application of physical principles.

Core Course Topics
1. Kinematics in one and two dimensions
2. Newton's laws
3. Circular motion
4. Work and energy
5. Impulse and momentum
6. Torque and equilibrium
7. Elasticity and simple harmonic motion
8. Fluids
9. Waves and sound
10. Heat and thermodynamics

Apply kinematic equations in one and two dimensions correctly.
Apply Newton's laws correctly to conceptual and numerical problems.
Determine velocity and acceleration for uniform circular motion.
Describe the motion of an object using work, kinetic energy, and potential energy.
Determine the changes in motion in terms of impulse and momentum.
Determine torque on a body and quantify its effects for a static system.
Describe simple harmonic motion using kinematics, dynamics, and energy.
Explain Pascal's principle, Archimede's principle, and Bernoulli's principle.
Demonstrate how different properties of a medium affect the speed of a wave.
Describe a wave using the terms wavelength, frequency, amplitude, and speed.
Explain heat and its relationship to temperature and phase changes.
Manipulate equipment safely and effectively to collect and analyze data.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Student learning will be assessed through classroom examinations including a cumulative final exam. Students will submit a written lab report for each experiment performed which will be used to assess if the student followed instructions, collected the data correctly, analyzed the data, and was able to draw an appropriate conclusion from the analysis. Conceptual understanding and problem-solving skills will be evaluated using homework, collaborative activities or projects, and exams.

Texts
Standard General (Algebra-based) Physics Textbook

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for PHYS 131

PHYS132 - General Physics II

Overview

Subject
Physics

Academic Department
Physics, Astronomy, and Earth Sciences

School
Science, Tech, Engr & Math

Course Description
Builds on the concepts introduced in PHYS-131. Topics include electricity, magnetism, light, and modern physics. Three hours of lecture and three hours of laboratory per week.

Course Pre-requisite(s)
PHYS131 General Physics I with a C grade or better

Credit Hours
4

Total Contact Hours

Total Instructor Contact Hours:
92

Total Student Contact Hours:
92

Course Fee
22

Academic Level
Undergraduate

General Education Category
Natural Sciences

Michigan Transfer Agreement (MTA) Category
Category 6: Natural Sciences - Applied Degrees, Category 6: Natural Sciences - Transfer Degrees - Lecture and Lab

Goals, Topics, and Objectives

Course Goals
The goal of this course is to develop and strengthen critical thinking skills and scientific literacy through the study and application of physical principles.

Core Course Topics

1. Ohm's Law and Power in Circuits
2. Series, Parallel, and Combination Circuits
3. Kirchhoff's Rules
4. Electric Force and Electric Fields
5. Electric Potential Energy and Electric Potential
6. Magnetic Force and Magnetic Fields
7. Induction and Transformers
8. AC Circuits
9. Optics
10. Modern Physics

Analyze a circuit containing one or more resistors with one or more voltage sources.

Determine electric force on a particle due to one or more charges.

Determine the electric field and electric potential due to one or more charges.

Determine the magnetic force on a moving charge and a current-carrying wire, as well as the magnetic torque on a current-carrying coil, due to the presence of a magnetic field.

Determine the magnetic field near permanent magnets, around current-carrying wires, inside current-carrying loops, and through current-carrying solenoids.

Describe the motion of a charged particle due to present electric and magnetic fields.

Determine the induced emf and resulting current for a conductive loop transformer in the presence of a changing magnetic field or a transformer stepping up or down voltage.

Analyze a series AC circuit containing a resistor, inductor, and capacitor.

Describe continuous and discrete emission spectra using Wein's Law and Bohr's Model.

Describe the characteristics and phenomena of light, including reflection, refraction, dispersion, diffraction, interference, polarization, and Doppler Effect.

Predict and depict image formation for curved mirrors and thin lenses.

Manipulate equipment safely and effectively to collect and analyze data.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Student learning will be assessed through classroom examinations including a cumulative final exam. Students will submit a written lab report for each experiment performed which will be used to assess if the student followed instructions, collected the data correctly, analyzed the data, and was able to draw an appropriate conclusion from the analysis. Conceptual understanding and problem-solving skills will be evaluated using homework, collaborative activities or projects, and exams.

Texts
Standard General (Algebra-based) Physics Textbook

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for PHYS 132

PHYS133 - Principles of Physics

Overview

Subject
Physics

Academic Department
Physics, Astronomy, and Earth Sciences

School
Science, Tech, Engr & Math

Course Description
Explores physical principles of motion, energy, fluids, electro-magnetism, waves, light, radiation, and the atom. Course is designed to meet the need for a one semester course in physics in many program areas including Allied Health, Teacher Education, Business, and Social Science. Three hours of lecture and two hours of laboratory per week.

Course Pre-requisite(s)
One year of high school algebra with a grade of C or better OR a satisfactory score on the Math placement exam OR eligible for gateway MATH courses at HFC.

Credit Hours
4

Total Contact Hours

Total Instructor Contact Hours:
77

Total Student Contact Hours:
77

Course Fee
22

Academic Level
Undergraduate

General Education Category
Natural Sciences

Michigan Transfer Agreement (MTA) Category
Category 6: Natural Sciences - Applied Degrees, Category 6: Natural Sciences - Transfer Degrees - Lecture and Lab

Goals, Topics, and Objectives

Course Goals
The goal of this course is to develop and strengthen critical thinking skills and scientific literacy through the study and application of physical principles.

Core Course Topics

1. Scientific Method
2. Kinematics and Newton's Laws
3. Work and Energy
4. Impulse and Momentum
5. Torque and Static Equilibrium
6. Elasticity and Fluids
7. Heat and Specific Heat
8. Waves and Sound
9. Electricity and Magnetism
10. Light
11. Modern Physics

Apply the scientific method to real world problems.

Describe the motion of a body under constant acceleration.

Explain how Newton's Laws apply to linear and circular motion.

Use energy conservation to analyze falling, swinging, and oscillating motion.

Analyze collisions involving two or more bodies.

Use static equilibrium to analyze forces acting on different parts of a body.

Analyze the pressure in a fluid using Boyle's Law, Archimede's Principle, Pascal's Principle, and Bernoulli's Principle.

Explain how heat is related to temperature and phase changes.

Demonstrate how different properties of the medium affect the speed of a wave.

Describe a wave using the terms wavelength, frequency, amplitude, and speed.

Explain standing waves and how they apply to various musical instruments.

Explain simple, series, and parallel circuits.

Describe electric force, electric fields, magnetic force, and magnetic fields.

Describe the characteristics and phenomena of light, including reflection, refraction, dispersion, diffraction, interference, polarization, and Doppler Effect.

Predict and depict image formation for thin lenses.

Manipulate equipment safely and effectively to collect and analyze data.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Student learning will be assessed through classroom examinations including a cumulative final exam. Students will submit a written lab report for each experiment performed which will be used to assess if the student followed instructions, collected the data correctly, analyzed the data, and was able to draw an appropriate conclusion from the analysis. Conceptual understanding and problem-solving skills will be evaluated using homework, collaborative activities or projects, and exams.

General Course Requirements and Recommendations
Students are expected to attend all class sessions.

Texts
Standard Conceptual Physics Fundamentals Textbook (Example - Hewitt)

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for PHYS 133

PHYS231 - Engineering Physics I

Overview

Subject
Physics

Academic Department
Physics, Astronomy, and Earth Sciences

School
Science, Tech, Engr & Math

Course Description
Designed to meet the requirements of engineering students and physics majors. Covers kinematics, dynamics, energy, rotational motion, gravitation, simple harmonic motion, and thermodynamics. Four hours of lecture and three hours of laboratory activities per week. NOTE: Recommended co-requisite is MATH-183.

Course Pre-requisite(s)
MATH180 Calculus 1 with a C grade or better

Credit Hours
5

Total Contact Hours
Total Instructor Contact Hours:
107

Total Student Contact Hours:
107

Course Fee
22

Academic Level
Undergraduate

General Education Category
Natural Sciences

Michigan Transfer Agreement (MTA) Category
Category 6: Natural Sciences - Applied Degrees, Category 6: Natural Sciences - Transfer Degrees - Lecture and Lab

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
A student may receive credit for PHYS231 Engineering Physics I by earning either:

1. A score of 4 or higher on AP Physics C: Mechanics Exam
2. A score of 6 or higher on the International Baccalaureate-Higher Level (IB-HL) Physics Exam.

Goals, Topics, and Objectives

Core Course Topics

1. Vector Addition and Multiplication
2. Kinematics of one- and two-dimensional systems.
3. Dynamics of Motion
4. Momentum and Impulse
5. Work, Energy, and Energy Conservation
6. Thermodynamics
7. Kinematics and Dynamics of Rotational Motion
8. Gravitation and Planetary Motion
9. Simple Harmonic Motion

Demonstrate the ability to solve complex physics problems by breaking them down into smaller constituents.

Describe the motion of an object in both one and two dimensions using the correct kinematic variables. This includes the interpretation of kinematic graphs.

Identify the various forces acting on a system of objects and apply Newtons Laws to that system using vector addition.

Describe the concepts of work, kinetic energy, and potential energy and apply the principals of conservation of mechanical energy to physical systems.

Use the concepts of impulse and momentum to solve problems involving colliding objects.

Describe the rotational motion of an object using the correct kinematic and dynamic variables.

Apply Newton's Law of Universal Gravitation and Kepler's Laws to orbital motion.

Analyze the periodic motion of undamped and damped harmonic oscillators.

Use kinetic molecular theory to examine heat transfer and thermal equilibrium.

Apply the laws of thermodynamics to examine gas phase processes.

Apply skills and models learned in the course to hands-on laboratory experiments.

Apply teamwork skills in conducting laboratory experiments, data interpretation, and communicating results.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
• Student learning will be assessed through a combination of in-classroom examinations, including a final exam. • Students will communicate lab results for each experiment performed during instructor supervised laboratory sessions. • Students will practice techniques introduced in class via assigned homework problems. • Conceptual understanding will be evaluated through classroom discussions and on the class exams.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for PHYS 231

PHYS232 - Engineering Physics II

Overview

Subject
Physics

Academic Department
Physics, Astronomy, and Earth Sciences

School
Science, Tech, Engr & Math

Course Description
Designed to meet the requirements of engineering students and physics majors. Covers electrostatics, including electric fields, forces, and potential; electrical circuits, including resistors, capacitors, and inductors; magnetic fields and forces; induction; electromagnetic waves; and optical systems, including diffraction, refraction, and image formation. Four hours of lecture and three hours of laboratory activities per week.

Course Pre-requisite(s)
PHYS231 Engineering Physics I with a C grade or better and MATH183 Calculus II with a C grade or better

Credit Hours
5

Total Contact Hours
Total Instructor Contact Hours:
107

Total Student Contact Hours:
107

Course Fee
22

Academic Level
Undergraduate

General Education Category
Natural Sciences

Michigan Transfer Agreement (MTA) Category
Category 6: Natural Sciences - Applied Degrees, Category 6: Natural Sciences - Transfer Degrees - Lecture and Lab

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
A student may receive credit for PHYS232 Engineering Physics II by earning either:

1. A score of 4 or higher on AP Physics C: Electricity and Magnetism Exam.
2. A score of 6 or higher on the International Baccalaureate-Higher Level (IB-HL) Physics Exam.

Goals, Topics, and Objectives

Core Course Topics

1. Electric charge, field, force, and potential
2. Capacitance and dielectrics
3. Basic electrical circuits, involving resistors, capacitors, inductors, and EMFs
4. Magnetic fields and forces
5. Electromagnetic Induction
6. Maxwell's Equations
7. Electromagnetic Waves
8. Optical systems, including diffraction, refraction, and image formation.

Demonstrate the ability to solve complex physics problems by breaking them down into smaller constituents.
Apply electrostatic principles to find the electric field, electric potential, and forces produced by charge distributions.
Demonstrate the working principles of capacitors.
Apply electrostatic concepts to describe the motion of charged particles in conductors.
Analyze resistive circuits to determine equivalent resistance, current, and power dissipation.
Use Ampere's Law and the Biot-Savart Law to determine magnetic fields.
Calculate the magnetic forces on moving charged particles.
Apply Faraday's Law and Lenz's Law to determine the magnitude and direction of induced emf and current.
Analyze circuits involving resistors, capacitors, inductors, and AC EMF sources.
Determine the properties of electromagnetic waves, including intensity, polarization, and how they are derived from Maxwell's Equations.
Describe diffraction, interference, and refraction using the wave properties of light.
Determine the characteristics of images formed in optical systems involving lenses and mirrors.
Apply skills and models learned in the course to hands-on laboratory experiments.
Apply teamwork skills in conducting laboratory experiments, data interpretation, and communicating results.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement

- Student learning will be assessed through a combination of in-classroom examinations, including a final exam.
- Students will communicate lab results for each experiment performed during instructor supervised laboratory sessions.
- Students will practice techniques introduced in class via assigned homework problems.
- Conceptual understanding will be evaluated through classroom discussions and on the class exams.

Texts
Standard University Level, Calculus Based Physics Textbook

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for PHYS 232

PLMB101 - Fundamentals of Plumbing & Pipefitting

Overview

Subject
Energy Technology

Academic Department
Building Sciences

School
Business, Entrepreneurshp, PD

Course Description
Introduces plumbing principles. Topics include the proper selection of materials for installation and repair of gas, domestic water, sewer, soil, waste, vent systems, and various pipefitting systems. Utilizes blueprints and isometric diagrams throughout the course. Some laboratory activities.

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
30

Academic Level
Undergraduate

Goals, Topics, and Objectives

Course Goals
To provide students with knowledge and skills to understand and develop the proper procedures utilized in the selection of materials for the installation and repair of sewer, soil, waste, and vent systems. Understandings of the fundamentals and equipment and procedures relative to sewer, soil, waste and vent systems. Be able to use critical-thinking and problem-solving skills in addressing the procedures, safety issues, and planning to complete successful residential and commercial systems.

Core Course Topics
1. Safety and introduction to plumbing principles.
2. Plumbing and pipfitting blueprint reading, symbology, and application of isometric drawings.
3. Plumbing and pipefitting materials used in residential and commercial applications, special fittings, and specific materials restrictions as per codes.
4. Specialty plumbing and pipefitting tools for installation of no-hub, cast-iron, and flexible plumbing.
5. Introduction to gas piping in buildings, materials and safety, and sizing procedures for gas branches and mains.
6. Calculations for the sizing of storm and sanitary drains.
7. Joining and installation procedures for drains and sizing procedures for roof and parking lot drains.
8. Plumbing and pipefitting fixtures, application and installation procedures, plumbing traps, types, and restrictions.
9. Specialty fixtures and their installation including water fountains, slop sinks, and hot tub heaters.
10. Testing and inspecting plumbing and pipefitting systems, and principles of rough and finish plumbing.

Explain the proper layout of plumbing systems.

Select the proper size building drains and vents using the Michigan State Plumbing Codes.

Select the proper materials for installing various pipe-fitting systems.

Apply the proper techniques for repair of hot-water systems.

Discuss and describe the proper procedures for doing material take-offs from blueprints.

Demonstrate the use of isometric diagrams related to plumbing/ pipefitting.

Solve practical shop exercises in the proper layout and design of sewer, soil, waste, and vent systems.

Demonstrate the selection and proper use of tools.

Demonstrate the use of hsop math in the piping grade.

Solve practical math problems used in piping systems.

Demonstrate being able to find information quickly from a reference source.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
All assessment of student achievement is left to the discretion of the individual instructor.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for PLMB 101

PLMB110 - Drains, Wastes, and Vents

Overview

Subject
Energy Technology

Academic Department
Building Sciences

School
Business, Entrepreneurshp, PD

Course Description
Introduces the Michigan State Plumbing Code and the proper selection of materials for the installation and repair of sewer, soil, waste, and vents systems. Covers proper procedures for the design, sizing, and construction of residential plumbing systems. Introduces commercial systems and plumbing cross-connections. The use of blueprints and isometric diagrams are reviewed throughout the course. Also includes how to test plumbing systems in their various stages.

Credit Hours
2

Total Contact Hours
Total Instructor Contact Hours:
32

Total Student Contact Hours:
32

Course Fee
40

Academic Level
Undergraduate

Goals, Topics, and Objectives

Course Goals
To provide students with knowledge and skills to understand and develop the proper procedures utilized in the selection of materials for the installation and repair of sewer, soil, waste, and vent systems. Candidates will learn foundation of skills and understandings of the fundamentals, equipment and procedures relative to sewer, soil, waste and vent systems. Develop critical thinking and problem solving skills in addressing the procedures, safety issues and planning to complete successful residential and commercial systems.

Core Course Topics
1. Safety and plumbing principles.
2. Plumbing blueprint reading, symbols, and application of isometrics.
3. Plumbing materials used in residential and commercial applications, special fittings, and specific materials restrictions as per codes.
4. Specialty plumbing tools for installation of no-hub, cast-iron, and flexible plumbing.
5. Gas piping in buildings, materials and safety applications, and sizing procedures for gas branches and mains.
6. Sizing of storm and sanity drains.
7. Joining and installation procedures for drains and sizing procedures for roof and parking lot drains.
8. Plumbing fixtures, application and installation procedures, plumbing traps, types and restrictions, and sizing of water supply piping.
9. Specialty fixtures, water fountains, slop sinks, hot water heaters, and installation procedures for specialty fixtures.

Explain the proper layout of plumbing systems.

Design building drains, vent, and water distribution systems using sizing tables.

Define techniques for renovating plumbing systems.

Define the proper techniques for testing back-flow preventers.

Discuss and describe the proper procedures for doing material take-offs from blueprints.

Demonstrate the use of isometric diagrams for plumbing pipe-fitting systems.

Perform practical shop exercises in the proper layout and design of sewer, soil, waste and vent systems.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
All students will be required to complete a comprehensive final examination that assesses the learning of all course objectives. This exam must be weighted in a manner so that this exam score is worth a minimum of fifteen percent of the final course grade. This exam is to be a common exam administered to all sections of TAPP110 Drains, Wastes, & Vents.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for PLMB 110

PLMB115 - Water Supply & Distribution Systems

Overview

Subject
Energy Technology

Academic Department
Building Sciences

School
Business, Entrepreneurshp, PD

Course Description
Enables students interested in construction, apprenticeship, multi-skilled technician, and plumbing industries to properly select materials and methods of installation/protection of potable water supply and distribution systems. Students will review fixtures, choosing materials, appliances, appurtenances and best installation practices for sustainable potable water supply systems and will also become familiar with inspecting, testing, plumbing repair and related systems.

Course Pre-requisite(s)
PLMB101 Fund of Plumbing & Pipefitting, PLMB110 Drains, Wastes, and Vents

Credit Hours
2

Total Contact Hours
Total Instructor Contact Hours:
32

Total Student Contact Hours:
32

Course Fee
30

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Skilled Demonstration

Credit for Prior College Level Learning (CPCLL) Details
Skilled Demonstration Details

A hands-on demonstration to display competence of course learning objectives.

Goals, Topics, and Objectives

Core Course Topics

1. Potable Water Systems
2. Backflow Prevention and Devices
3. Potable Water System Testing
4. Potable Water System Repair

Design and install a potable water supply system according to plumbing codes.

Define plumbing fixtures and appliances as related to potable plumbing.

Define common causes of back-flow and back-flow prevention devices.

Identify terms related to water reclamation and and recycling.

Define methods for performing potable water supply and distribution piping tests and repair.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
The following will be used to assess student's academic achievement:

- Quizzes
- Tests
- Labs 70% and above throughout semester

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for PLMB 115

PLMB118 - Plumbing, Pipefitting Material Joining

Overview

Subject
Energy Technology

Academic Department
Building Sciences

School
Business, Entrepreneurshp, PD

Course Description
Introduces plumbing and pipe-fitting materials joining. Topics included are mechanical joints/pipe-cutting, brazing with turbo torches and oxyacetylene, soldering with LP and MAPP gases, plastic PVC pipe-joining, flared fittings, plastic fusion welding, and dielectric fittings. Students are required to study the theory behind these methods and perform hands-on labs.

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
30

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Mechanical Joints
2. Pipe soldering: LP and MAPP Gases
3. Turbo Torch Soldering and Welding
4. Oxyacetylene brazing and welding
5. Cutting various types of piping material
6. Dielectric Fittings: Copper vs Blackpipe/Galvanized Pipes
7. Flared/Compression Fittings

Demonstrate the cleaning and soldering of copper pipes; brazing and silver soldering with a turbo-torch.

Demonstrate how to cut and thread pipes; braze, weld, join and cut various pipes.

Identify and use tools for various types of piping materials.

Demonstrate PVC pipe joining and the use of glues and heat fusion.

Demonstrate the ability to work with 2 dissimilar piping metals using dielectric fittings.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
The following will be used to assess student's academic achievement:

- Quizzes
- Tests
- Labs 70% and above throughout the semester

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for PLMB 118

PLMB120 - Steam and Hot Water Systems

Overview

Subject
Energy Technology

Academic Department
Building Sciences

School
Business, Entrepreneurshp, PD

Course Description
For technical construction apprentices and those interested in seeking basic pipefitting -plumbing skills. Introduces principles of steam and hydronic systems, converter trap sizing, steam traps, and skimming boilers. Also examines the proper selection, sizing, and installation of pipe and fittings related to hydronic and steam systems. Application exercises allow students the opportunity to design and lay out typical systems. Laboratory activities.

Course Pre-requisite(s)
ENT103 - Missing course, ENT104 - Missing course and ENT105 - Missing course

ENT-103, ENT-104, and ENT-105

Credit Hours
2

Total Contact Hours
Total Instructor Contact Hours:
32

Total Student Contact Hours:
32

Course Fee
40

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Principles of heat flow in a building; use and application of heat charts and formulas.
2. Heat loss calculations.
3. Planning a heating systems.
4. Steam heating systems: one-pipe, two-pipe, and steam traps.
5. Steam heating system design: placement of pipe and specific connections.
6. Class project: steam heating design.
7. Hot water heating systems: direct-return, reverse-return, air control, and vents.
8. Radiant panel heating panels, hot water boilers, and controls.
9. Boiler fittings, valves, steam gauges, and relief valves.
10. Design of a radiant heating system.
11. Class project: series loop, one zone system.
12. Class project -one pipe system.
13. Class project: two pipe reverse-return system.

Describe the principles of heat loss in a structure.

Differentiate between steam and hot water systems.

Identify the procedures for how to lay out functioning heating systems.

Classify the different types of systems according to their pipe arrangements.

Identify the safety equipment required by Michigan state law for work on boilers and furnaces.

Design steam and hydronic systems using manufacturer sizing tables.

Demonstrate the selection process for sizing the vent and chimney liner using GAMA tables.

Describe relevant combustion safety devices and their use.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
All assessment of student achievement is left to the discretion of the individual instructor.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for PLMB 120

PLMB225 - Plumbing Design

Overview

Subject
Energy Technology

Academic Department
Building Sciences

School
Business, Entrepreneurshp, PD

Course Description
Topics include health and safety, water supply, water wastes, piping materials, and building plans and drawings. The proper use of plumbing tools and equipment selection emphasizing overall job safety is integrated into the course material. Also covers the components of plumbing systems and installations.

Course Pre-requisite(s)
ENT124 - Missing course and PLMB110 Drains, Wastes, and Vents

Credit Hours
4

Total Contact Hours
Total Instructor Contact Hours:
62

Total Student Contact Hours:
62

Course Fee
40

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Types of work involved in plumbing/pipefitting.
2. Procedures for ensuring a potable water supply.
3. The purpose of codes and licensing in Michigan.
4. Advanced plumbing/pipefitting principles.
5. Proper use of tools for various job applications.
6. Practices to ensure a safe working environment.
7. Math problems common in plumbing/pipefitting.
8. Public and private waste disposal.
9. Proper safety procedures for working with gases.
10. Piping materials used in piping trades.
11. Correct selection of appropriate plumbing fixtures.
12. How to select appropriate valves and faucets.

Design plumbing systems.

Identify the National Standards Plumbing Code Principles.

Identify and use proper tools.

Define safe trade practices.

Solve math problems used in designing piping/plumbing systems.

Analyze the inter-workings of a piping/plumbing system in residential and commercial settings.

Apply the State of Michigan Mechanical-Plumbing Codes.

Compare and contrast the various materials used in the piping/plumbing industry.

Distinguish between the various components of plumbing systems.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
All assessment of student achievement is left to the discretion of the individual instructor.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for PLMB 225

PLMB240 - Plumbing Materials & Components

Overview

Subject
Energy Technology

Academic Department
Building Sciences

School
Business, Entrepreneurshp, PD

Course Description
Examines water distribution and pipe sizing. Topics include hot water systems, tanks, drains, wastes, vent systems, construction drawings and diagrams, and system sizing. Introduces material joining through soldering, and brazing. Includes the various plastic pipes and fittings being used in today's industry. Explores how to evaluate issues related to water pipe sizing in buildings, including concepts of water flow and water supply fixture units.

Course Pre-requisite(s)
PLMB101 Fund of Plumbing & Pipefitting and PLMB110 Drains, Wastes, and Vents

Credit Hours
4

Total Contact Hours
Total Instructor Contact Hours:
62

Total Student Contact Hours:
62

Course Fee
50

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Water distribution system: layout and sizing methods.
2. Pipe sizing.
3. Appliances used in plumbing systems.
4. Mechanical drawings and their application in piping installations.
5. Safety procedures and safety issues related to welding.
6. Importance of venting a plumbing system.
7. Design features and use of pumps and ejectors.
8. Plumbing codes used for sizing water distribution systems.
9. Policy and procedures for using rigging.

Assess a water distribution system and its individual parts.

Evaluate the advantages of thermoplastic piping materials compared to other materials used in plumbing systems.

Identify in a drawing the various parts of the drains, wastes, and vent systems.

Describe the operation of the plumbing trap.

Demonstrate the basic skills of pipe welding.

Organize a safe approach for handling materials on the job.

Apply symbols used for standard materials on prints.

Demonstrate safe rigging practices and use of equipment in hoisting and rigging.

Differentiate and calculate the relationships between pressure, force, and area in liquid systems.

Demonstrate the basic skills of soldering, brazing, and flame-cutting.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
All assessment of student achievement is left to the discretion of the individual instructor.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for PLMB 240

PLMB250 - Plumbing Pipefitting Code

Overview

Subject
Energy Technology

Academic Department
Building Sciences

School
Business, Entrepreneurshp, PD

Course Description
Explores how to utilize the State of Michigan Plumbing Code to solve real-life problems (International Plumbing Code). Covers study habits and processes necessary to interpret and apply the code. Also helps prepare students for entry- level positions in the plumbing, multi-skilled maintenance, repair, and apprenticeship fields.

Credit Hours
2

Total Contact Hours
Total Instructor Contact Hours:
32

Total Student Contact Hours:
32

Course Fee
40

Academic Level
Undergraduate

Goals, Topics, and Objectives

Course Goals
To provide the knowledge and skills to understand and abide by the established plumbing codes.

Core Course Topics

1. Code regulations, terms and history
2. Pipe joints and connections.
3. Drain systems and storm drain systems.
4. Plumbing system venting, traps interceptors and backflow preventers.
5. Plumbing fixtures.
6. Potable water supplies.
7. Plumbing materials and fixtures.
8. Plumbing-pipefitting inspections, tests and maintenance.

Interpret building plumbing and pipefitting diagrams using accepted conventions.

Identify which article applies to a given situation.

Select the correct material for a plumbing or pipefitting job.

Cite articles and sub-articles from the code that apply to specified problems.

Size a plumbing system according to the code.

Understand the content and structure of the Michigan Plumbing Code (or most recent version).

Fast reference the Code book for relevant information.

Identify all sections of the Code by reference numbers and titles.

Assessment, Requirements, and Outcomes

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for PLMB 250

PLMB255 - Plumbing Fixture Installation

Overview

Subject
Energy Technology

Academic Department
Building Sciences

School
Business, Entrepreneurshp, PD

Course Description
Covers the operation and availability of common plumbing fixtures and appliances. Focuses on the selection and installation of fixtures in residential, commercial, and industrial applications. The control and accessories used in fuel burning appliances, the differences in vent capacity and vent type, and the steps necessary to place an appliance in service are covered. Explores how electricity is incorporated into a piping system including concepts of energy savings and safety.

Course Pre-requisite(s)
PLMB101 Fund of Plumbing & Pipefitting, PLMB110 Drains, Wastes, and Vents

Credit Hours
4

Total Contact Hours
Total Instructor Contact Hours:
62

Total Student Contact Hours:
62

Academic Level
Undergraduate

Goals, Topics, and Objectives

Course Goals
This course is for the advanced student in the pipefitter/plumber program. Students will gain knowledge in the areas of designing system, profitability, and the codes involved in the plumbing construction business. Students will be exposed to the required design of the drains, waste, and vent systems and the introduction of basic electricity, its components, and application in the piping industry.

Core Course Topics
1. Productivity and profitability in the plumbing trade.
2. Installation of plumbing fixtures in residential and commercial applications.
3. Comprehensive review of the national fuel codes.
4. Use of a transit level related to elevations and grades.
5. Calculations involving the capacities of volume and weight of water.
6. Requirements involved for the sizing of storm drains.
7. The effect of temperature in plumbing and pipe fitting systems.
8. Introduction to basic electricity.
9. Proper applications of control wiring.

Design and install commercial, industrial, and institutional fixtures and appliances.

Demonstrate skills in reading blueprints and specifications of buildings and site plans.

Assemble proper fixture fittings and trim for residential, commercial, industrial, and institutional systems.

Demonstrate the use of the various ordinances involved in construction.

Calculate the volume and areas of cylindrical and rectangular tanks.

Evaluate types of appliance vent systems and their installation.

Apply knowledge of safety and accessibility when working in different environments.

Interpret electric systems and how they are incorporated in the piping industry.

Compare various types of temperature controls.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Final Exam accounts for 25% of the final grade.
Skill Sharpening Sessions (5) account for 50% of the grade.
Attendance and being on time, class participation, and homework assignments account 25% of the grade.
More than 3 absences = failure of the class.
Classroom participation is a requirement.
Professionalism is expected at all times, and tardiness and absences will not be tolerated.

Texts
Required course materials are available in the department.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for PLMB 255

PLMB275 - Pract Plumbing Lab-State License Prep

Overview

Subject
Energy Technology

Academic Department
Building Sciences

School
Business, Entrepreneurshp, PD

Course Description
For the apprentice and journeyman. Covers the subject of pipes and tubes, their uses, the materials of which they are made, and some of the related general specifications. Also covers existing and new process skills related to plumbing-pipefitting. Course is 25% lecture related to safety, tools, equipment, and demonstrations prepping; the rest of the course emphasizes laboratory activities.

Course Pre-requisite(s)
Instructor Permission

Credit Hours
4

Total Contact Hours
Total Instructor Contact Hours:
62

Total Student Contact Hours:
62

Course Fee
50

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics
1. Plumbing and pipe-fitting and their differences.
2. Various types of piping used in plumbing and pipe-fitting
3. Various types of industry piping joints.
4. State of Michigan Piping Test Project.
5. Drains, wastes, and vents.
6. Gas, hydronic, and refrigeration piping.

Explain the various types of joints used with common piping materials.

Demonstrate an understanding of pipe sizes and schedules as required by blueprints and specifications.

Describe the two general processes for manufacturing steel pipe.

Compare and contrast pipe, mild steel, extra strong, double extra strong, piping ID, and OD dimensions.

Perform threading pipe with fittings and install fittings per piping diagrams.

Demonstrate proper skills when administering the four types of piping end finishes.

Understand standard pipe nomenclature related to carbon and alloy steel.

Describe brass and copper pipe, how they are manufactured, and their uses and applications.

Demonstrate appropriate skills on cutting and joining of cast iron vent piping.

Repair exist cast iron piping.

Define the two principle classes of copper tubing.

Demonstrate proper skills for preparing copper tubing for various applications.

Demonstrate proper skills for PVC piping and thermal plastic.

Demonstrate proper assembly of drains, wastes and vents according to the plumbing codes.

Define the types of piping, gas, hydronic and refrigeration.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Practical testing in the lab environment.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for PLMB 275

POLS101 - Am Gov:Democrat Partic Civic Engagement

Overview

Subject
Political Science

Academic Department
Social Sciences

School
Liberal Arts

Course Description
Examines principles and problems of American political institutions, including the role of government and politics in society, the balancing of liberty with authority, and the theories of the state. Probes mechanisms of citizen empowerment and control (public opinion, pressure groups, political parties, elections), and formal structure. Public policy as a means to meet societal needs is analyzed and evaluated along with the tools that citizens can use to influence the public policy process. Also examines foreign and domestic public policy and contemporary events. Includes how to write effective arguments as well as how to formally present political arguments.

Course Pre-requisite(s)
Eligible to take ENG courses at HFC.

Credit Hours
4

Total Contact Hours

Total Instructor Contact Hours:
62

Total Student Contact Hours:
62

Course Fee
10

Academic Level
Undergraduate

General Education Category
Social Sciences

Michigan Transfer Agreement (MTA) Category
Category 4: Social Sciences - Transfer Degrees, Category 4: Social Sciences - Applied Degrees

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
Determined by department.

Goals, Topics, and Objectives

Core Course Topics

1. American Democracy and Political Culture
2. Constitutional Framework and Federalism
3. Executive Branch
4. Legislative Branch
5. Judicial Branch
6. Civil Liberties
7. Civil Rights
8. Political Parties and Interest Groups
9. Political Socialization and Public Opinion
10. The Mass Media Role in Politics and Public Policy
11. Citizen Participation and Electoral Politics
12. Civic Participation and Responsibility
13. Domestic Economic Policy
14. Educational and Social Policy
15. American Foreign Policy

Identify and explain the institutions of U.S. government and the constitutional framework: The legislative, executive, and judicial branches of government.

Describe the public policy process.

Explain civil rights and civil liberties from a historical perspective, and analyze how civil rights and civil liberties impact American society today.

Describe how American democracy is based on citizen participation and the electoral process.

Discuss extra-constitutional institutions and their impact on Americans.

Compose a strategic political participation action plan for articulating political voice.

Distinguish between civil rights and liberties and civic responsibilities.

Evaluate the norms and values of democratic societies and institutions with the actions of political participation.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Each instructor will identify and implement appropriate methods to assess the achievement of the learning objectives for the course.

General Course Requirements and Recommendations
Civic Action Activity surrounding a contemporary political will be a central focus of this course. Students will develop a Strategic Plan for raising their concern/issue on the public and the political agenda at a local, state, national, or international level.

Texts
Common text book to be determined by Political Science Department.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for POLS 101

POLS131 - Intro to American Gov't & Politi Science

Overview

Subject
Political Science

Academic Department
Social Sciences

School
Liberal Arts

Course Description
Examines principles and problems of American political institutions, including the role of government and politics in society, the balancing of liberty with authority, and theories of the state. Also explores mechanisms of popular control (public opinion, pressure groups, political parties, elections) and formal structure. Additional components include foreign policy, public policy, and contemporary events.

Course Pre-requisite(s)
Eligible to take ENG courses at HFC.

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
10

Academic Level
Undergraduate

General Education Category
Social Sciences

Michigan Transfer Agreement (MTA) Category
Category 4: Social Sciences - Applied Degrees, Category 4: Social Sciences - Transfer Degrees

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
Determined by department

Goals, Topics, and Objectives

Course Goals
All associate degree recipients from Henry Ford College will be able to demonstrate an understanding of American society, with emphasis on major ideas and events that have influenced American society, OR social and political institutions that shape American society, OR diverse populations and cultures that compose American society.

Core Course Topics
1. Constitutional Framework
2. Executive Branch
3. Legislative Branch
4. Judicial Branch
5. Civil Liberties and Civil Rights
6. Extra-constitutional institutions
7. Citizen Participation and Electoral Politics
8. Public Policy Process

Identify and explain the institutions of U.S. government and the constitutional framework: legislative, executive, and judicial branches of government.
Describe the public policy process. Describe how policy is developed and implemented.
Explain civil rights and civil liberties from a historical perspective and analyze how civil rights and civil liberties impact American society today.
Describe how American Democracy is based on citizen participation and the electoral process.
Discuss extra-constitutional institutions and their impact on American society.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Each instructor will identify and implement appropriate methods to assess the achievement of the learning objectives for the course. In addition, POLS131 Intro Amer Gov't & Pol Sci also fulfills the General Education Learning Objective: Civil Society and Culture. Therefore, all instructors teaching the course will participate in a common form of assessment.

Part I: Multiple Choice Questions Content Assessment. This test assesses the General Education Requirements, for outcome #1 Civil Society and Culture.

1. A set of multiple-choice questions has been prepared for use in all sections of POLS131 Intro Amer Gov't & Pol Sci.
2. Questions will be provided to each instructor at the end of the semester. These questions can be used in connection with the final exam.
3. Students will use a separate ScanTron form for these questions.
4. The instructor should scan the forms and the scores will be calculated into the final grade for each student. The assessment test should represent *at least 5 percent of the final exam grade*; ScanTron forms should be turned in to the Political Science Faculty Coordinator for Assessment after final grades for the semester are due. The Coordinator of Instructional Assessment will combine forms from all sections of POLS131 Intro Amer Gov't & Pol Sci for analysis.
5. Multiple-choice questions cover the seven domains in Section XIV, learning objectives identified above in Section X to focus on the assessing the Civil Society and Culture General Education Outcome. Faculty members should be sure to incorporate these topics into the course during the semester.

1. Questions will be provided to each instructor at the end of the semester. These questions are to be used in connection with the final exam.
2. Students will use a separate ScanTron form for these questions.
3. The instructor should scan the forms and the scores will be calculated into the final grade for each student. The assessment test should represent *at least 5 percent of the final exam grade.*
4. ScanTron forms should be turned in to the Social Science Division Secretary after final grades for the semester are due.
5. The Coordinator of Instructional Assessment will combine forms from all sections of POLS131 Intro Amer Gov't & Pol Sci for analysis.
6. Multiple-choice questions cover scenarios that analytically explore how American System of Government and Politics works through the interaction of institutions, laws, acts, and precedence.
7. Each faculty member teaching POLS131 Intro Amer Gov't & Pol Sci will incorporate a written assignment into the course requirements. This will no longer be part of the General Education Outcome assessment process. The assignment can be completed outside of class which provides an appropriate period of time for students to complete. The assignment can take one of the following forms:
    1. A journal project in which students summarize and analyze three or more articles on a country, region (e.g., Latin America or the Pacific Rim), or a social or policy issue with global implications (e.g., immigration policy, global warming, or child labor).
    2. A research paper that contrasts the United States with one or more countries, using three recent, substantive articles from newspapers, magazines, or scholarly journals.
    3. A research paper that explores an issue of general concern and how political and government action is dealing with the given issue using three recent, substantive articles from newspapers, magazines, or scholarly journals.
    4. A critical review of an article, which has global implications, from a professional journal, in which the student summarizes the article, relates the topic to class materials, and properly cites the source.
    5. Essay questions that are given in class as part of exams, quizzes, or other assignments. Students should complete such assignments on their own.
    6. Written Assignments on-line assignments submitted through the College's learning management system.

Texts
Texts are chosen by individual instructors.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for POLS 131

POLS135 - American Legal System & Process

Overview

Subject
Political Science

Academic Department
Social Sciences

School
Liberal Arts

Course Description
Considers legal systems as social/political phenomena and explores the U.S. Constitution, landmark court decisions, and patterns of behavior characterizing legal system participants. This course is appropriate as a lead-in for those interested in the fields of political science, criminal justice, legal secretary, and paralegal, as well as those considering law school.

Course Pre-requisite(s)
Eligible to take ENG courses at HFC.

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
10

Academic Level
Undergraduate

General Education Category
Social Sciences

Michigan Transfer Agreement (MTA) Category
Category 4: Social Sciences - Applied Degrees, Category 4: Social Sciences - Transfer Degrees

Goals, Topics, and Objectives

Core Course Topics

1. Law, Courts, and Politics
2. Law and Legal Systems
3. Federal Courts
4. State Courts
5. Lawyers and Legal Representation
6. Judges
7. Mobilizing the Law: Litigants, Interest Groups, Court Cases, and the Media
8. Trial Courts: The Preliminary Stages of Criminal Cases
9. Trial Courts: Bargaining and Sentencing in Criminal Courts
10. Trial Courts: The Preliminary Stages of Civil Cases
11. Trial Courts: Dispositions of Civil Cases
12. Trial
13. The Appellate Process
14. The Supreme Court: Deciding What to Decide
15. The Supreme Court: The Justices and Their Decisions
16. Final Research Project

Define the organization of the federal courts.

Identify the U.S. courts as legal and political institutions.

Demonstrate an understanding of time and chronology with regard to the American legal system and respective landmark court decisions.

Compare adversarial legal systems versus non-adversarial legal systems.

Identify sources to support a position, analyze which sources best support the position taken, and summarize the supporting sources into a written argument.

Analyze cause and effect in social/political phenomena as it relates to decisions made throughout the years by the U.S. courts.

Trace elements of change and continuity with regard to landmark court decisions.

Analyze and describe the impact of major court decisions, personalities, citizen stakeholders, special interest groups, and places with regard to the decisions made by the U.S. courts.

Compare and contrast the American legal system with the legal systems of other nations.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment methods for this course include weekly assignments and discussion board activities and a mid-term and final written research project.

Texts
Judicial Process: Law, Courts, and Politics in the United States, 3rd edition, by David W. Neubauer and Stephen S. Meinhold. Thomson -Wadsworth Publishing.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for POLS 135

POLS150 - Leadership, Organizing & Public Service

Overview

Subject
Political Science

Academic Department
Social Sciences

School
Liberal Arts

Course Description
This course provides the leadership tools and theories to help students create change through hands-on work in community organizations. The course will use a project-based learning to examine the strategic nature of coalition building, networking, and goal/power mapping. This will be done within diverse communities to provide help students advocate with the experience for and effect change within an organization. The course is designed for both those students already engaged in community-based organizations and partnerships as well as students who are interested in working in/and or developing such organizations.

Course Pre-requisite(s)
Eligible to take ENG courses at HFC.

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Academic Level
Undergraduate

General Education Category
Social Sciences

Michigan Transfer Agreement (MTA) Category
Category 4: Social Sciences - Applied Degrees, Category 4: Social Sciences - Transfer Degrees

Goals, Topics, and Objectives

Course Goals
Provide students with an opportunity to learn about leadership in organizations and the community. Allow students to evaluate leadership styles in unique settings and develop strategic thinking around methods for achieving effective leadership in differing contexts. Provide students with an introduction to tools for critically evaluating strategic actions and planning in organizations and the community.

Core Course Topics

1. Leadership Survey
   a. Examine different styles and types of leadership.
   b. Examine what is leadership.
   c. Explore different styles of leadership.
   d. Evaluate key components of human leadership.
2. Leadership and Organizations
   a. Examine Leadership in Organizations and the Community.
   b. Describe the attributes of leadership in organizations and the community.
3. Power Analysis (By leadership, in organization and community)
   a. Identify power within organizations and communities: Attributes of Power, Identifying Power, and Identifying power variables at play in organization and community.
   b. Evaluate leadership's use of power to effect change.
4. Power and Relationship
   a. Build Power in Organizations, Networks, and the Community.
   b. Examine Listening and Inclusion in organizational leadership.
   c. Explore Compromise and Consensus building in organizations.
5. Diversity, Inclusion and Power Dynamics and Change
   a. Examine the Power Dynamics in Organization based on diversity and organization within organization.
   b. Examine how Diversity and Inclusion impact Organizational change.
6. Building Networks
   a. Evaluate mechanisms to build effective networks between organization community.
   b. Analyze networks to foster power of organization.
   c. Describe organizations and community environment.
7. Environmental Analysis (Issues, Agendas, Goals, Objectives, Timelines, Partners, Opponents, Strengths, Weakness, Barriers)
   a. Explore established rules.
   b. Analyze changing rules.
   c. Evaluate Alternatives.
8. Norms and Values of Democratic Society
   a. Evaluate actions based on democratic norms and values including but not limited to: inclusion, diversity, liberty, and community.

Examine different styles and types of leadership.

Examine what is leadership.

Explore different styles of leadership.

Evaluate key components of human leadership.

Examine Leadership in Organizations and the Community.

Describe the attributes of leadership in organizations and the community.

Identify power within organizations and communities: Attributes of Power, Identifying Power, and Identifying power variables at play in organization and community.

Evaluate leadership's use of power to effect change.

Build Power in Organizations, Networks, and the Community.

Examine Listening and Inclusion in organizational leadership.

Explore Compromise and Consensus building in organizations.

Examine the Power Dynamics in Organization based on diversity and organization within organization.

Examine how Diversity and Inclusion impact Organizational change.

Evaluate mechanisms to build effective networks between organization community.

Analyze networks to foster power of organization.

Describe organizations and community environment.

Explore established rules.

Analyze changing rules.

Evaluate Alternatives.

Evaluate actions based on democratic norms and values including but not limited to: inclusion, diversity, liberty, and community.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Leadership action plan in an organization and/or community. Final Evaluation of Course

Grading Scale

- 90-100% = A
- 80-89% = B
- 70-79% = C
- 60-69% = D
- 59% and below = E

Texts
Instructor Determined.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for POLS 150

POLS152 - International Relations

Overview

Subject
Political Science

Academic Department
Social Sciences

School
Liberal Arts

Course Description
Introduces the diverse phenomena of international relations, the complex patterns of political and economic conflict, American foreign policy, and the interdependence between nation-states and non-governmental organizations. Coursework encourages the student to think critically and analytically about the world and develop a healthy skepticism toward simple solutions to complex world problems.

Course Pre-requisite(s)
Eligible to take ENG courses at HFC.

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
10

Academic Level
Undergraduate

General Education Category
Social Sciences

Michigan Transfer Agreement (MTA) Category
Category 4: Social Sciences - Applied Degrees, Category 4: Social Sciences - Transfer Degrees

Goals, Topics, and Objectives

Core Course Topics

1. Structure of the International Systems
2. International Political Theory
3. International Conflict and Conflict Resolutiona. Ethnicity, Conflict, and Cooperation
4. Globalization and Internationalization of Society
5. Human Rights and Political Democracy
6. International Political Economy

Critically evaluate the concepts and historical patterns, developments, and relationships between and among states.

Describe what mechanisms are, and can be used for relations between states.

Critically evaluate the competing theories that dominate international relations theory, practice and politics.

Explore the formal mechanisms present for international interactions especially those of political, economic, and national and international security concerns.

Discuss the role that International Governmental Organizations (IGOs) play in international conflict, commerce, and other interactions among and between states.

Identify the most important IGOs including the United Nations, the World Court, and the European Union.

Identify how Nongovernmental Organizations influence practice, policy, and decision-making processes among and between states.

Compare and contrast how various players on the international scene can impact events and issues internationally.

Discuss the patterns of globalization occurring today, and how these factors influence peoples lives in their community and communities throughout the world.

Address the conditions of human rights and group rights from various perspectives; explore how the international community can influence these patterns in particular locals.

Discuss major international issues and how IGOs, NGOs, states, and global citizens can influence the resolution of these issues.

Identify issues of conflict and analyze how and why they occur and what are some of the primary mechanisms for conflict resolution.

Analyze the nexus of domestic and international politics. Be able to evaluate where they influence each other.

Examine of the economic structures and mechanisms that regulate and influence state interaction; especially the International Monetary Fund (IMF), the World Bank (WB), and the World Trade Organization (WTO).

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Each instructor will identify and implement appropriate methods to assess the achievement of the learning objectives for the course.
1. Exams (Multiple Choice and/or Essay)
2. Written Assignment. Each faculty member teaching POLS152 International Relations will incorporate at least one written assignment into the course requirements. The assignment can be completed outside of class and given an appropriate period of time for students to complete. The written assignment should be used as an assessment for the General Education Outcome of Civil Society and Culture. The results should be reported by the faculty member to the faculty Assessment Coordinator for inclusion in SPOL.
The assignment must take one of the following forms:

- A research paper in which students explore and analyze a current international issue. The papers should utilize minimum of 5 sources including scholarly journals, major newspaper articles, or other substantive sources.
- Multiple writing assignments determine by instructor: online Discussion Board Assignments, Critical Thinking Responses Essays, and/or Critical Issue Essays and Presentations.

Texts
Texts are chosen by individual instructors.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for POLS 152

POLS155 - State & Local Government

Overview

Subject
Political Science

Academic Department
Social Sciences

School
Liberal Arts

Course Description
Examines political institutions and processes in the fifty states, including their cultures and constitutions, as well as the public policies of state governments in areas such as education, social welfare, and the environment. Uses Michigan and Metropolitan Detroit as a basis for comparison to study state and local governments. This course is appropriate as a lead-in for those interested in the fields of political science, public administration, and criminal justice.

Course Pre-requisite(s)
Eligible to take ENG courses at HFC.

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
10

Academic Level
Undergraduate

General Education Category
Social Sciences

Michigan Transfer Agreement (MTA) Category
Category 4: Social Sciences - Applied Degrees, Category 4: Social Sciences - Transfer Degrees

Goals, Topics, and Objectives

Core Course Topics

1. Capacity of State and Local Government
2. Federalism and the States
3. State Constitutions
4. Elections and Citizen Participation
5. Parties, Interest Groups, and Campaigns
6. State Legislatures
7. Governors
8. Public Administration and State and Local Bureaucracies
9. State Judiciaries
10. Community Political Systems
11. Forms of Local Government
12. State and Local Relations
13. Taxing and Spending at the State and Local Level
14. Economic Development
15. Education Policy
16. Criminal Justice Policy
17. Social Welfare and Health Policy

Categorize state constitutions among the fifty states.

Describe the models of judicial selection.

Describe Federalism and the relationship between the states and the federal government.

Compare and contrast the part-time legislature versus the professional legislature and its relationship with the executive branch of the state.

Compare and contrast the powers of state governors.

Describe city charters and different structures of local government.

Describe bureaucratic politics in states and communities.

Describe the politics of fiscal policy at the state and local level.

Explain the development of policies for criminal justice, education, social welfare, and health at the state and local Level.

Compare and contrast Michigans culture, policies, constitution, and governmental structure with other state and local governments.

Compare and contrast the political and governmental relationship between the city and suburbs within major metropolitan areas (e.g. Metro Detroit).

Explain the financing and activities of campaigns and political parties at the state level.

Explain various economic development strategies used by states and local communities around the United States.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Each instructor will identify and implement appropriate methods to assess the achievement of the learning objectives for the course.

Texts
Each instructor will choose an appropriate textbook for the course.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for POLS 155

POLS200 - Introduction to Peace and Conflict

Overview

Subject
Political Science

Academic Department
Social Sciences

School
Liberal Arts

Course Description
Examines social, political, economic, ethnic, cultural, and religious conflict and the methods used to resolve, regulate, and prevent conflict. The mechanisms for developing cooperation to resolve and mitigate conflict among peoples and states are central to this course. Also focuses on international and intra-state conflicts including civil wars, social strife, and rebellion, and employs case studies and other scientific methods to investigate specific conflicts and the strategies of conflict resolution.

Course Pre-requisite(s)
Eligible to take ENG courses at HFC.

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
10

Academic Level
Undergraduate

General Education Category
Social Sciences

Michigan Transfer Agreement (MTA) Category
Category 4: Social Sciences - Applied Degrees, Category 4: Social Sciences - Transfer Degrees

Goals, Topics, and Objectives

Core Course Topics

1. Events of Peace and Conflict: Social, Economic, Political, Ideological, Territorial, and Ethno-Cultural dominated conflict. (#1, 2, 6)
2. Theories, Concepts and Examples of Conflict and War. (#3,7, 8)

   i. Political, Economic, and Ideological factors in conflict. ii. Social, Territorial, and Ethno-Cultural factors in conflict.
3. Theories, Concepts and Examples of Conflict Resolution (#1, 7,8)

   i. Negative Peace 1. Diplomacy, Negotiations, and Conflict Resolution 2. Peace through strength 3. Disarmament and Arms Control 4. International Organizations and Law 5. Ethical and Religious Perspectives ii. Positive Peace 1. Human Rights 2. Ecological Well-being 3. Economic Well-being 4. Non-Violence
4. Institutions of Conflict Resolution (#4, 5)
5. Methods and Practices of Conflict Resolution (#4, 8)

Apply the concepts and theories of conflict analysis and resolution.
Describe the social, economic, political, ideological, territorial, and ethno-cultural components as they relate to the intensity and type of conflict.
Evaluate conflicts at the inter-state and intra-state level from the economic, social, political, ideological, territorial, and ethno-cultural perspectives.
Describe the role that various actors play in conflict development, escalation, and resolution.
Describe the most important actors involved in international conflict resolution today.
Discuss the impact of conflict on individuals, groups, and state relations as well as on human rights.
Discuss major contemporary and historical conflicts. Analyze the roles of various actors in the development and resolution of the conflict.
Identify economic, social, political, ideological, and ethno-cultural conditions as they related to peace and conflict.
Analyze contemporary events of peace and conflict resolution and evaluate options for conflict resolution and peace building.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Each instructor will identify and implement specific appropriate methods to assess the achievement of the learning objectives for the course.

Assessment of Course Should Include the following:
1. Exams (Multiple Choice and/or Essay)

2. Written Assignment. Each faculty member teaching POLS200 Intro to Peace and Conflict will incorporate at least one written assignment into the course requirements. The assignment can be completed outside of class and given an appropriate period of time for students to complete. A written assignment should be used as an assessment for the General Education Outcome of Civil Society and Culture. The results should be reported by the faculty member to the faculty Assessment Coordinator for inclusion in SPOL.

The assignment must take one of the following forms:

A research paper in which students explore and analyze a current international issue. The papers should utilize minimum of 5 sources including scholarly journals, major newspaper articles, or other substantive sources.

Multiple writing assignments determine by instructor: online Discussion Board Assignments, Critical Thinking Responses Essays, and/or Critical Issue Essays and Presentations.

Texts
Texts are chosen by individual instructors.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for POLS 200

POLS201 - Public Policy: Topics & Analysis

Overview

Subject
Political Science

Academic Department
Social Sciences

School
Liberal Arts

Course Description
A special topics course that allows students to explore issues of public policy. Focuses on the basics of public policy including agenda setting, policy formulation, policy implementation, and policy evaluation. Themes may vary. Themes may be specific such as healthcare policy or they might be more general such as state and local economic policy. Guest speakers.

Course Pre-requisite(s)
Eligible to take ENG courses at HFC.Or Instructor Permission.

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
10

Academic Level
Undergraduate

General Education Category
Social Sciences

Michigan Transfer Agreement (MTA) Category
Category 4: Social Sciences - Applied Degrees, Category 4: Social Sciences - Transfer Degrees

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
Determined by department

Goals, Topics, and Objectives

Core Course Topics

1. Public Policy
2. Agenda Setting
3. Policy Formulation
4. Policy Implementation
5. Policy Analysis and Evaluation
6. Politics ad Public Policy

Identify the basic issues surrounding one or more area(s) of public policy.
Identify the steps and factors involved in the public policymaking process.
Analyze public policy using the steps by which public policies are implemented and evaluated.
Analyze how policymaking actors, events, and decision makers are influenced.
Analyze how various players impact the development of public policy alternatives.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Students will be assessed with at least one major exam that shall be either multiple choice, short-answer, and/or essay in format and at least one major writing assignment.

Texts
To be determined by instructor.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for POLS 201

POLS202 - Foreign Policy: Topics & Analysis

Overview

Subject
Political Science

Academic Department
Social Sciences

School
Liberal Arts

Course Description
A special topics course that allows students to explore various issues in foreign policy. Focuses on American foreign policy including military, diplomatic, and trade policy. Themes vary from semester to semester. In addition, themes may be very specific such as nuclear weapons proliferation or more general such as American foreign policy in the Middle East or global trade. Guest speakers.

Course Pre-requisite(s)
Eligible to take ENG courses at HFC.Or Instructor Permission.

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
10

Academic Level
Undergraduate

General Education Category
Social Sciences

Michigan Transfer Agreement (MTA) Category
Category 4: Social Sciences - Applied Degrees, Category 4: Social Sciences - Transfer Degrees

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
Determined by department

Goals, Topics, and Objectives

Core Course Topics

1. Foreign Policy
2. Foerign Policy Actors
3. Setting the Foreign Policy Agenda
4. Decision-Making Process in Foreign Policy
5. Policy Analysis and Evaluation
6. Politics and Foreign Policy

Identify the basic issues surrounding one or more area(s) of foreign policy.
Identify the steps and factors involved in the foreign policy-making process.
Analyze foreign policy through the steps by which public policies are implemented and evaluated.
Analyze how policy-making actors, events, and decision makers are influenced.
Analyze how various players impact the development of foreign policy alternatives.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Students will be assessed with at least one major exam that shall be either multiple choice, short-answer, and/or essay in format and at least one major writing assignment.

Texts
To be determined by instructor.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for POLS 202

PSCI131 - Introduction to Physical Science

Overview

Subject
Physical Science

Academic Department
Physics, Astronomy, and Earth Sciences

School
Science, Tech, Engr & Math

Course Description
Topics explored include physics, chemistry, astronomy, meteorolgy, and geology. Non-science majors have an opportunity to better understand and appreciate the interaction between energy and matter in nature. Laboratory experiences are designed to improve scientific interest and to develop confidence in dealing with science.

Credit Hours
4

Total Contact Hours
Total Instructor Contact Hours:
77

Total Student Contact Hours:
77

Course Fee
18

Academic Level
Undergraduate

General Education Category
Natural Sciences

Michigan Transfer Agreement (MTA) Category
Category 6: Natural Sciences - Applied Degrees, Category 6: Natural Sciences - Transfer Degrees - Lecture and Lab

Goals, Topics, and Objectives

Course Goals
While developing the major topics of physical science, the overall goals are to help non-science majors understand and appreciate the interaction of energy and matter in nature, to help students improve their scientific understanding, and to develop confidence in their interpretation and reaction to scientific issues affecting the world.

Core Course Topics

1. History of Astronomy
2. The Earth-Moon System
3. The Solar System
4. Spectroscopy
5. Telescopes
6. The Sun
7. Stellar Birth, Evolution, and Death
8. Minerals
9. Rocks
10. Plate Tectonics
11. The Ocean Floor
12. Ocean Water
13. Ocean Currents
14. Tides
15. Waves
16. Ocean Life
17. The Atmosphere
18. Relative and Absolute Humidity
19. Condensation Altitude
20. Cloud Formation and Cloud Types
21. Wind
22. High and Low Air Pressure
23. Cyclones and Anticyclones
24. Air Mass Characteristics
25. Frontal Boundaries
26. Thunderstorms, Tornadoes, and Hurricanes

Demonstrate knowledge of Earth and celestial systems
Categorize various types of information using logic and reasoning
Apply scientific concepts learned in one context of the course to other course topics
Analyze data on specific components of Earth systems, e.g. oceans
Interpret the likelihood of various outcomes given a particular set of initial conditions
Interpret the meaning of visually-presented scientific information (e.g. graphs and charts)
Exhibit professionalism and safe laboratory behavior

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Student achievement will be assessed using exams, laboratory assignments, quizzes, and take-home reading assignments.

General Course Requirements and Recommendations
This is a four (4) credit course with three (3) hours of lecture and two (2) hours of laboratory per week. A student is expected to attend all class sections. Attendance is taken by the instructor.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for PSCI 131

PSCI135 - Sound & Light in Fine-Arts

Overview

Subject
Physical Science

Academic Department
Physics, Astronomy, and Earth Sciences

School
Science, Tech, Engr & Math

Course Description
The physical nature of sound and light waves will be covered focusing on how they relate to music, art, theater, and each other as well as how subjective perceptions of the ear and eye are related to objective properties of waves. Offered as a general education science course for students interested in Fine-Arts, specifically, Music, Art, or Theater.

Credit Hours
4

Total Contact Hours
Total Instructor Contact Hours:
77

Total Student Contact Hours:
77

Course Fee
18

Academic Level
Undergraduate

General Education Category
Natural Sciences

Michigan Transfer Agreement (MTA) Category
Category 6: Natural Sciences - Applied Degrees, Category 6: Natural Sciences - Transfer Degrees - Lecture and Lab

Goals, Topics, and Objectives

Course Goals
The goal of this course is to strengthen critical thinking skills and scientific literacy through the study of the objective and subjective phenomena related to sound and light.

Core Course Topics

1. Vibrating Systems
2. Waves
3. Sound & Hearing
4. Musical Intervals & Scales
5. Musical Instruments
6. Architectural Acoustics
7. The Nature & Speed of Light
8. Geometic Optics & Optical Instruments
9. Interference and Diffraction
10. Basic Color Theory
11. Light & Color in Nature

Relate the subjective properties of sound and light to their corresponding objective properties.

Describe the characteristics and phenomena of sound waves, including reflection, interference, and the Doppler Effect.

Describe the structure of the human ear and explain how it works.

Explain musical intervals is in terms of steps in a scale and numerical frequency ratios.

Describe how standing waves are produced on strings, in tubes, and on membranes.

Categorize musical instruments by their physical characteristics.

Predict and depict image formation for curved mirrors and thin lenses.

Explain how optical instruments such as microscopes and telescopes work.

Describe the structure of the human eye and explain how it works.

Identify primary, secondary, and complementary colors.

Demonstrate a basic knowledge of color addition and color subtraction.

Describe the characteristics and phenomena of light, including reflection, refraction, dispersion, diffraction, interference, and polarization.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Students will be assessed of their learning by exams, class participation, homework and laboratory performance.

General Course Requirements and Recommendations
Students are expected to attend all class sessions. Attendance is taken by the instructor during all class meetings.

Texts
Lab Manual (with accompanying textbook/eBook): Sound and Light Experiments - LoPresto & Murrell

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for PSCI 135

PSY131 - Introductory Psychology

Overview

Subject
Psychology

Academic Department
Social Sciences

School
Liberal Arts

Course Description
Introduces elementary concepts and principles related to the scientific study of behavior and of the mental processes of cognition and affective states. Variables examined include the history of psychology, the scientific method, theory, biological foundations, psychological processes related to cognition and affective states, developmental changes over time, and applications related to healthy and unhealthy personalities.

Course Pre-requisite(s)
ENG094 ALP: Reading and Writing eligible

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
10

Academic Level
Undergraduate

General Education Category
Social Sciences

Michigan Transfer Agreement (MTA) Category
Category 4: Social Sciences - Applied Degrees, Category 4: Social Sciences - Transfer Degrees

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
Determined by department

Goals, Topics, and Objectives

Course Goals
The initial goal of the course is to provide structure and teaching for the acquisition of a hierarchical organization of facts and concepts constituting elementary knowledge of the science of behavior and mental processes. Since the goals of this science are to enhance each student's ability to describe, understand, predict and influence human behavior, thinking critically about themselves and others is a second and more important course goal.

Core Course Topics
1. History of psychology and its research methods
2. The biological foundations of psychology
3. Sensation and perception
4. States of consciousness
5. Learning
6. Memory
7. Cognition, language and intelligence
8. Motivation and emotion
9. Personality
10. Stress and health psychology
11. Psychological disorders
12. Therapies
13. Social psychology
14. Development

History of psychology and its research methods: Understand scientific method as applied to psychology

History of psychology and its research methods: Distinguish between scientific and nonscientific statements (i.e., between explanations and interpretations).

History of psychology and its research methods: Recognize examples of standard experimental designs.

History of psychology and its research methods: Select correct designs for different research problems.

History of psychology and its research methods: Recognize examples of various experimental controls.

History of psychology and its research methods: Discuss elementary statistical problems relevant to research.

The biological foundations of psychology: Know technical terms.

The biological foundations of psychology: Select correct definitions of terms.

The biological foundations of psychology: Match terms and definitions.

The biological foundations of psychology: Distinguish between correct and incorrect usage of terms.

The biological foundations of psychology: State correct definition of terms.

Sensation and perception: Understand basic psychological concepts.

Sensation and perception: Recognize new examples of various concepts.

Sensation and perception: Distinguish among examples of closely related concepts.

Sensation and perception: Recognize correct and incorrect interpretations of statements in which basic concepts appear.

Sensation and perception: Recognize correct and incorrect usage of concepts.

Sensation and perception: State concepts in own words.

States of consciousness: Understand theories of human behavior.

States of consciousness: Identify different theories based on descriptions.

States of consciousness: Match prominent psychologists with their theories.

States of consciousness: Recognize new applications of different theories.

States of consciousness: Match procedures with theories.

States of consciousness: Appraise the adequacy of a given theory.

Learning: Understand behavioral problems.

Learning: Identify behavioral principles operating in various real and hypothetical cases.

Learning: Select best analysis of real and hypothetical cases.

Learning: Describe several economic, sociological, and political aspects of behavioral problems.

Learning: Contrast the treatment of individuals with behavioral problems in the United States with the treatment of similar patients in other countries.

Memory: Understand behavior-change and behavior-influence procedures.

Memory: List steps in various procedures.

Memory: Identify descriptions of various procedures.

Memory: Select correct interpretations of different procedures.

Memory: Recognize new examples of procedures.

Memory: Recognize correct and incorrect applications of procedures.

Cognition, language and intelligence: Appreciate the role of the scientific method in psychology.

Cognition, language and intelligence: Explain why evidence-based approaches are key to establishing all sciences.

Cognition, language and intelligence: Differentiate between evidence-based approaches and those that lack supporting data.

Cognition, language and intelligence: Report on a popular conception of behavior that is not based on evidence.

Cognition, language and intelligence: Share research that appears to refute a previously held belief about human or animal behavior.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Each instructor will implement appropriate methods for assessing the achievement of the learning objectives of the course with the following exceptions:

- Each student will be required to write at least one critical thinking paper, with guidelines determined by each instructor.
- Either a comprehensive final examination covering the entire coursework or a midterm covering the first half and an exam covering the second half.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for PSY 131

PSY152 - Child Psychology

Overview

Subject
Psychology

Academic Department
Social Sciences

School
Liberal Arts

Course Description
Covers physical, cognitive, social, and emotional development through adolescence. Explores a variety of theories, recent research, and practical application.

Course Pre-requisite(s)
PSY131 Introductory Psychology with grade of C or higher

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
10

Academic Level
Undergraduate

General Education Category
Social Sciences

Michigan Transfer Agreement (MTA) Category
Category 4: Social Sciences

Goals, Topics, and Objectives

Core Course Topics

1. The Foundations of Child Psychology
2. Research Methods in Child Psychology
3. Genetic Foundations of Child Psychology
4. Prenatal Development, Pregnancy, and Birth
5. Infancy and Toddlerhood
   a. Physical Development
   b. Cognitive Development
   c. Social Development
   d. Emotional Development
6. Early Childhood
   a. Physical Development
   b. Cognitive Development
   c. Social Development
   d. Emotional Development
7. Middle Childhood
   a. Physical Development
   b. Cognitive Development
   c. Social Development
   d. Emotional Development
8. Adolescence
   a. Physical Development
   b. Cognitive Development
   c. Social Development
   d. Emotional Development

Describe the field of child psychology
Compare and contrast major research methods used in child psychology
Analyze child psychology theorists and their theories
Describe the genetic mechanisms that impact development
Describe the various processes of prenatal development, pregnancy, and birth
Evaluate the different physical, cognitive, social, and emotional developmental changes in infancy and toddlerhood
Evaluate the different physical, cognitive, social, and emotional developmental changes in early childhood
Evaluate the different physical, cognitive, social, and emotional developmental changes in middle childhood
Evaluate the different physical, cognitive, social, and emotional developmental changes in adolescence
Explain the impact of culture, ethnicity, gender, and socioeconomic status on development

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Each instructor will implement appropriate methods for assessing the achievement of the learning objectives of the course with one exception: Each student will be required to write at least one critical thinking assignment, with guidelines determined by the instructor.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for PSY 152

PSY251 - Abnormal Psychology

Overview

Subject
Psychology

Academic Department
Social Sciences

School
Liberal Arts

Course Description
This course covers the epidemiology, etiology, treatment, and ethical and legal considerations associated with psychopathology in society. Evidence-based criteria will be used to examine individual, group, community and cross-cultural therapeutic techniques.

Course Pre-requisite(s)
PSY131 Introductory Psychology, C or better

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
10

Academic Level
Undergraduate

General Education Category
Social Sciences

Michigan Transfer Agreement (MTA) Category
Category 4: Social Sciences - Applied Degrees, Category 4: Social Sciences - Transfer Degrees

Goals, Topics, and Objectives

Core Course Topics

1. Historical perspectives on psychopathology
2. Contemporary perspectives on psychopathology
3. Legal, ethical, and professional issues related to psychopathology
4. Assessment and diagnosis of psychopathology
5. Neurodevelopmental disruptive disorders
6. Eating, sleeping, and elimination disorders
7. Schizophrenia and other psychotic disorders
8. Mood disorders and suicide
9. Neurocognitive disorders
10. Stress and trauma-related disorders
11. Anxiety and obsessive-compulsive disorders
12. Somatic symptom and dissociative disorders
13. Personality disorders
14. Substance-related and addictive disorders
15. Sexual and gender disorders

Describe several historical treatments for psychopathology.
Evaluate the psychoanalytic paradigm in terms of todays evidence-based standards.
Explain why the concept of defense mechanism is not falsifiable.
Compare different treatment paradigms for a specific disorder.
Analyze a vignette to identify the clients disorder and formulate an evidence-based treatment plan.
Discuss why the multiaxial diagnostic approach was removed from the Diagnostic and Statistical Manual of Mental Disorders.
Evaluate the impact of schizophrenia and other psychotic disorders on society.
Appraise the present use and misuse of psychoactive medications.
Relate current evidence-based approaches to treating eating disorders.
Explain why the personality disorders are frequently unresponsive to treatment.
Summarize the epidemiological evidence relating to the incidence and prevalence of psychopathology in society.
Present the symptomology of an individual with a neurocognitive disorder.
Differentiate between sexual disorders that are treatable versus those that are typically intractable.
Analyze several strengths and weaknesses of treatment strategies for addiction.

Contrast cross-cultural approaches to the diagnosis and treatment of selected psychopathological disorder.

Evaluate the strengths and weaknesses of the Diagnostic and Statistical Manual of Mental Disorders and the International Classification of Diseases with regard to diagnosing schizophrenia.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement

- Exams consisting of objective questions and short essays.
- Written case analysis of patients depicted in various educational videos.
- Written analyses of selected films with psychopathalogical content.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for PSY 251

PSY253 - Lifespan Development

Overview

Subject
Psychology

Academic Department
Social Sciences

School
Liberal Arts

Course Description
Covers the processes of change and stability in human development from conception through death. Course begins with the study of prenatal concerns and progresses through the years of infancy, childhood, adolescence, adulthood and aging. Discusses theory, research, and application associated with the biological, cognitive, affective, and social domains of development.

Course Pre-requisite(s)
PSY131 Introductory Psychology with a C grade or higher

Credit Hours

3

Total Contact Hours

Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
10

Academic Level
Undergraduate

General Education Category
Social Sciences

Michigan Transfer Agreement (MTA) Category
Category 4: Social Sciences - Applied Degrees, Category 4: Social Sciences - Transfer Degrees

Goals, Topics, and Objectives

Course Goals
This course emphasizes development across the lifespan. Students will gain knowledge and perspective of the interrelatedness of the biological, cognitive, affective, and social domains as they examine how and why people change or remain the same over the course of a lifetime.

Core Course Topics

1. Lifespan development basics
2. Developmental research designs
3. Heredity and environment in the development process
4. Theories of development
5. Pregnancy, prenatal development, and birth
6. Infancy and toddlerhood: Physical, cognitive, emotional, and social development: Major developmental issues
7. Early and middle childhood: Physical, cognitive, emotional, and social development: Major developmental issues
8. Adolescence: Physical, cognitive, emotional, and social development: Major developmental issues
9. Adulthood: Physical, cognitive, emotional, and social development: Major developmental issues
10. Death and dying

Define the field of lifespan development.

Summarize basic developmental issues and major factors that impact development.

Compare and contrast developmental research designs and apply research findings.

Explain the influence of genetics and environment on development.

Differentiate the current major theoretical perspectives of development.

Describe the processes of pregnancy, prenatal development, and birth.

Explain and analyze the physical, cognitive, social, and emotional developmental issues of infancy and toddlerhood.

Explain and analyze the physical, cognitive, social, and emotional developmental issues of adolescence.

Explain and analyze the physical, cognitive, social, and emotional developmental issues of adulthood.

Explain issues surrounding death and dying.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Each instructor will implement appropriate methods for assessing the achievement of the learning objectives of the course. These methods may include, but are not necessarily limited to, objective and/or written examinations, papers, Internet assignments, and library projects.

In addition, each student will be required to produce a critical thinking paper/project relevant to lifespan development. The details of the assignment are at the discretion of the instructor.

Texts
Textbook selection is determined by the department.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for PSY 253

PSY254 - Social Psychology

Overview

Subject
Psychology

Academic Department
Social Sciences

School
Liberal Arts

Course Description
This course focuses on how individual thought and behavior are impacted by the presence of others. Major evidence-based topics in the psychological and sociological approach to social psychology are covered. Examples include conformity, group processes, interpersonal attraction, prosocial behavior, aggression and prejudice.

Course Pre-requisite(s)
Complete PSY131 Introductory Psychology with a grade of C or better.

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
10

Academic Level
Undergraduate

General Education Category
Social Sciences

Michigan Transfer Agreement (MTA) Category
Category 4: Social Sciences - Applied Degrees, Category 4: Social Sciences - Transfer Degrees

Goals, Topics, and Objectives

Core Course Topics

1. Research methods
2. Social perception
3. Social cognition
4. The self
5. The need to justify our actions
6. Attitudes and attitude change
7. Conformity
8. Group processes
9. Interpersonal Attraction
10. Aggression
11. Prosocial behavior
12. Prejudice

Understand scientific method as applied to social psychology and can:

Distinguish between scientific and nonscientific statements.

Recognize examples of standard experimental designs.

Select correct designs for different research problems.

Recognize examples of various experimental controls.

Know technical social psychology terms and can:

Select correct definitions of terms.

Match terms and definitions.

Distinguish between correct and incorrect usage of terms.

State the correct definition of terms.

Understand basic social psychology concepts and can:

Recognize new examples of various concepts.

Distinguish among examples of closely related concepts.

Recognize correct and incorrect interpretations of statements in which basic concepts appear.

Recognize correct and incorrect usage of concepts.

State concepts in own words.

Understand social psychology theories and can:

Identify different theories based on descriptions.

Match prominent social psychologists with their theories.

Recognize new applications of different theories. 4.4 match hypotheses with theories.

Appraise the adequacy of a given theory.

Understand social psychological problems and can:

Identify psychological principles operating in various real and hypothetical cases.

Select the best analysis of real and hypothetical cases.

Describe how status, role, and class impact social psychological problems.

Contrast the psychological approach to selected social psychological problems with the sociological view.

Understand procedures for putting social psychology in action and can:

List steps in various procedures.

Identify descriptions of various procedures.

Select correct interpretations of different procedures.

Recognize new examples of procedures.

Recognize correct and incorrect applications of procedures.

Appreciate the role of the scientific method in social psychology and can:

Explain why evidence-based approaches are key to establishing the science of social psychology.

Distinguish between evidence-based approaches and those that lack supporting data.

Report on a popular conception of social behavior that is not based on evidence.

Identify research that appears to refute a previously held belief about social behavior.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Each instructor will identify and implement appropriate methods to assess the achievement of the learning objectives for the course.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for PSY 254

PSY257 - Health Psychology

Overview

Subject
Psychology

Academic Department
Social Sciences

School
Liberal Arts

Course Description
Explores the psychological dimensions of health and the prevention and management of illness. Emphasizes interaction between biological, social, and psychological factors in health and medical problems. Topics include the history and research methods of health psychology, biological foundations of health and illness, stress, prevention and positive psychology, exercise, sleep, and injury control, nutrition and eating disorders, substance abuse, chronic and life-threatening illnesses, complementary and alternative medicine, pain management, and the role of health psychology in healthcare settings.

Course Pre-requisite(s)
PSY131 Introductory Psychology with a C grade or higher

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
10

Academic Level
Undergraduate

General Education Category
Social Sciences

Michigan Transfer Agreement (MTA) Category
Category 4: Social Sciences - Applied Degrees, Category 4: Social Sciences - Transfer Degrees

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
Determined by department

Goals, Topics, and Objectives

Course Goals
This course explores the psychological dimensions of health and the prevention and management of illness. The interaction between biological, social, and psychological factors in health and medical problems is emphasized.

Core Course Topics

1. Introducing Health Psychology
    1. Describe the development of health psychology as a discipline.
    2. Describe the scope of the field of health psychology.
    3. Explain how the biopsychosocial model promotes the understanding of health and illness.
    4. Describe the basic concepts that guide the work of the health psychologist.
2. Research in Health Psychology
    1. Compare and contrast research methods used in the field of health psychology.
3. Biological Foundations of Health and Illness
    1. Describe the biological foundations of health and illness.
4. Stress
    1. Describe the physiology of stress.
    2. Compare and contrast the major models of stress and illness.
    3. Explain the psychosocial sources of stress.
    4. Analyze the importance of psychological factors, gender, ethnicity and culture, spirituality, sexuality, and age involved in health and illness.
5. Coping with Stress
    1. Describe various coping strategies and factors affecting the ability to cope.
    2. Explain the various coping interventions.
    3. Analyze the importance of psychological factors, gender, ethnicity and culture, spirituality, sexuality, and age involved in health and illness.
6. Staying Healthy
    1. Explain major theories of health and behavior.
    2. Compare and contrast the types of prevention.
    3. Explain positive psychology and thriving.
    4. Analyze the importance of psychological factors, gender, ethnicity and culture, spirituality, sexuality, and age involved in health and illness.
7. Exercise, Sleep, and Injury Control
    1. Describe physical activity, exercise, and fitness, and highlight their benefits.
    2. Describe sleep and its role in a healthy lifestyle.
    3. Describe injury control and its role in a healthy lifestyle.
    4. Analyze the importance of psychological factors, gender, ethnicity and culture, spirituality, sexuality, and age involved in health and illness.
8. Nutrition, Obesity, and Eating Disorders
    1. Explain the relationship between nutrition and disease.
    2. Explain factors involved in weight determination.
    3. Describe obesity from a biopsychosocial perspective, including causal factors, prevention, and treatments.
    4. Describe eating disorders from a biopsychosocial perspective, including causal factors, prevention, and treatments.
    5. Analyze the importance of psychological factors, gender, ethnicity and culture, spirituality, sexuality, and age involved in health and illness.
9. Substance Abuse
    1. Describe mechanisms of drug action and models of addiction.
    2. Describe alcohol use and abuse from a biopsychosocial perspective, including causal factors, prevention, and treatments.
    3. Describe tobacco use (including electronic cigarettes) and abuse from a biopsychosocial perspective, including causal factors, prevention, and treatment.
    4. Describe electronic cigarette and marijuana use from a biopsychosocial perspective.
    5. Analyze the importance of psychological factors, gender, ethnicity and culture, spirituality, sexuality, and age involved in health and illness.
10. Cardiovascular Disease and Diabetes
    1. Describe cardiovascular disease and diabetes from a biopsychosocial perspective, including risk factors, prevention, and treatments.
    2. Analyze the importance of psychological factors, gender, ethnicity and culture, spirituality, sexuality, and age involved in health and illness.
11. Cancer
    1. Describe cancer from a biopsychosocial perspective, including risk factors, prevention, treatments, and coping mechanisms.
    2. Analyze the importance of psychological factors, gender, ethnicity and culture, spirituality, sexuality, and age involved in health and illness.
12. HIV/AIDS and Other Communicable Diseases
    1. Explain the HIV/AIDS epidemic from a biopsychosocial perspective.
    2. Describe symptoms and stages, medical and psychosocial interventions, and coping with HIV and AIDS.
    3. Explain other communicable diseases from a biopsychosocial perspective.
    4. Analyze the importance of psychological factors, gender, ethnicity and culture, spirituality, sexuality, and age involved in health and illness.
13. The Role of Health Psychology in Health Career Settings
    1. Describe the criteria used to recognize and interpret symptoms.
    2. Describe characteristics of those seeking treatment and explain patient adherence to treatment.
    3. Explain the patient-provider relationship, including factors affecting the relationship, relationship models, communication, and the role of the Internet.
    4. Describe the current and changing health care system.
    5. Analyze the importance of psychological factors, gender, ethnicity and culture, spirituality, sexuality, and age involved in health and illness.
14. Managing Pain
    1. Describe the various aspects of pain, including measurement, physiology, psychosocial factors involved, and treatment.
    2. Analyze the importance of psychological factors, gender, ethnicity and culture, spirituality, sexuality, and age involved in health and illness.
15. Complementary and Alternative Medicine
    1. Compare and contrast traditional medicine with complementary and alternative medicine across cultures.
    2. Explain the effectiveness of complementary and alternative medicine.
    3. Explain how complementary and alternative medicine is indicative of a paradigm shift in medicine and healthcare in the United States.
    4. Analyze the importance of psychological factors, gender, ethnicity and culture, spirituality, sexuality, and age involved in health and illness.

Describe the development of health psychology as a discipline.

Describe the scope of the field of health psychology.

Explain how the biopsychosocial model promotes the understanding of health and illness.

Describe the basic concepts that guide the work of the health psychologist.

Compare and contrast research methods used in the field of health psychology.

Describe the biological foundations of health and illness.

Describe the physiology of stress.

Compare and contrast the major models of stress and illness.

Explain the psychosocial sources of stress.

Analyze the importance of psychological factors, gender, ethnicity and culture, spirituality, sexuality, and age involved in health and illness.

Describe various coping strategies and factors affecting the ability to cope.

Explain the various coping interventions.

Explain major theories of health and behavior.

Compare and contrast the types of prevention.

Explain positive psychology and thriving.

Describe physical activity, exercise, and fitness, and highlight their benefits.

Describe sleep and its role in a healthy lifestyle.

Describe injury control and its role in a healthy lifestyle.

Explain the relationship between nutrition and disease.

Explain factors involved in weight determination.

Describe obesity from a biopsychosocial perspective, including causal factors, prevention, and treatments.

Describe eating disorders from a biopsychosocial perspective, including causal factors, prevention, and treatments.

Describe mechanisms of drug action and models of addiction.

Describe alcohol use and abuse from a biopsychosocial perspective, including causal factors, prevention, and treatments.

Describe tobacco use (including electronic cigarettes) and abuse from a biopsychosocial perspective, including causal factors, prevention, and treatment.

Describe electronic cigarette and marijuana use from a biopsychosocial perspective.

Describe cardiovascular disease and diabetes from a biopsychosocial perspective, including risk factors, prevention, and treatments.

Describe cancer from a biopsychosocial perspective, including risk factors, prevention, treatments, and coping mechanisms.

Explain the HIV/AIDS epidemic from a biopsychosocial perspective.

Describe symptoms and stages, medical and psychosocial interventions, and coping with HIV and AIDS.

Explain other communicable diseases from a biopsychosocial perspective.

Describe the criteria used to recognize and interpret symptoms.

Describe characteristics of those seeking treatment and explain patient adherence to treatment.

Explain the patient-provider relationship, including factors affecting the relationship, relationship models, communication, and the role of the Internet.

Describe the current and changing health care system.

Describe the various aspects of pain, including measurement, physiology, psychosocial factors involved, and treatment.

Compare and contrast traditional medicine with complementary and alternative medicine across cultures.

Explain the effectiveness of complementary and alternative medicine.

Explain how complementary and alternative medicine is indicative of a paradigm shift in medicine and healthcare in the United States.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Each instructor will identify and implement appropriate methods to assess the achievement of the learning objectives for the course. These methods can include, but are not necessarily limited to, true-false, multiple-choice, matching, and essay examinations, as well as out-of-class papers, Internet assignments, audio and/or video conferences, and library projects.

Texts
Determined by full-time faculty.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for PSY 257

PTA102 - Introduction Physical Therapy Practice

Overview

Subject
Physical Therapy Assistant

Academic Department
Health, Education, and Human Services

School
Health & Human Services

Course Description
Introduces the field of physical therapy. Discusses the roles of various health professionals, the concept of the rehab team, the history and scope of physical therapy, legal and ethical issues related to communication and the practice of physical therapy, and organizational structures of various types of physical therapy facilities. Also covers the role of the Physical Therapist Assistant (PTA), various methods of documentation used in physical therapy, and the structure and function of the American Physical Therapy Association (APTA). Examines current issues and trends in physical therapy and the Guide to Physical Therapy Practice.

Course Pre-requisite(s)
Admission to the Physical Therapy Assistant AAS Degree program

Credit Hours
2

Total Contact Hours
Total Instructor Contact Hours:
32

Total Student Contact Hours:
32

Course Fee
15

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. History and Scope of Physical Therapy Practice
2. Professional Roles in Health/Care Rehabilitation Team
3. Role of The PTA
4. Guide to Physical Therapy Practice
5. APTA / Michigan Physical Therapy Association (MPTA)
6. Cultural Competence in Health Care
7. Ethical and Legal Issues in Physical Therapy
8. Reimbursement in Physical Therapy
9. Communication
10. Teaching and Learning in Physical Therapy
11. Documentation
12. Laws, Regulations, and Policies
13. Research and Evidence Based Practice

Outline important events in the history and development of the scope of physical therapy practice, specifically the PTA.

Describe the structure and function of the APTA.

Identify the role of the Physical Therapist (PT), PTA, and other members of the health care team and define their areas of responsibility utilizing the APTA Standards of Practice.

Differentiate between state regulations of both the PT and the PTA.

Explain the general organizational structure of a physical therapy department.

Identify the various settings where PTs and PTAs work.

Discuss and identify medical ethics and biomedical ethical principles in health care.

Be able to identify unethical behavior.

Explain the guide for conduct that PTAs are morally bound to follow.

Demonstrate good verbal, nonverbal, and written communication skills and describe the significance of effective communication.

Describe the purpose of medical records and legal issues related to their use.

Differentiate between the various types of documentation used in physical therapy practice.

Describe the various components in The Guide to PT Practice.

Describe the current advocacy issues related to the physical therapy profession.

Explain the difference between the types of insurance coverage for physical therapy services.

Identify the role of the PTA in obtaining insurance reimbursement, quality assurance, and supervision.

Explain the standards of billing and coding practices used in physical therapy services.

Demonstrate awareness of components of culture and belief systems relative to self and others.

Recognize the importance of understanding self and issues of personal biases and influences that affect self.

Identify specific laws, regulations, and policies related to the practice of physical therapy.

Access research literature from various sources, both print and electronic, and discuss the main elements of a research study.

Explain different research methodology, levels of evidence, and measurement science including reliability and validity.

Identify types of abuse and identify the appropriate authorities in which to report suspected abuse cases.

Describe the International Classification of Functioning, Disability, and Health.

Identify statements of impairments, activity limitations, and participation restrictions.

Define the terms diversity, equity, and inclusion.

Identify the social determinants of health that affect patient/client management in physical therapy.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Students will be assessed through a series of quizzes, written midterm, written final exam, written assignments, presentations, discussions, and group activities.
General Course Requirements and Recommendations
Students must pass this course with a "B-" or better to remain in the PTA Program. They must also pass at least one of the written exams with an 80% or higher in order to pass this course. For each written exam the student does not pass, he/she will also be required to complete a written review of the exam to be submitted to the instructor prior to taking the final exam. Instructors (or their designees) reserve the right to require students to provide picture identification for test taking, graded papers or projects or other appropriate purposes.

Grading Scale
Students will be assessed on the following scale:

- 99-100% = A+
- 93-98.9% = A
- 90-92.9% = A-
- 87-89.9% = B+
- 83-86.9% = B
- 80-82.9% = B-
- 76-79.9% = C+
- 70-75.9% = C
- 60-69.9% = D
- <60% = E

Texts
To be determined by program faculty.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for PTA 102

PTA110 - Therapeutic Techniques for PTA I

Overview

Subject
Physical Therapy Assistant

Academic Department
Health, Education, and Human Services

School
Health & Human Services

Course Description
Provides instruction in patient care with an emphasis on physical therapy interventions. Covers massage, body mechanics, bed mobility and positioning, passive range of motion (PROM) exercise, transfers, gait training, patient and family education, and the use of wheelchairs and assistive devices. Guided laboratory setting.

Course Pre-requisite(s)
Admission to the Physical Therapy Assistant AAS Degree (PTA) Program

Credit Hours
2

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
35

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Body Mechanics/Positioning
2. Medical Equipment
3. Bed Mobility
4. Massage
5. Documentation of Therapeutic Procedures
6. PROM
7. Wheelchairs and Assistive Devices
8. Transfers
9. Gait

Identify patients orientation to time, person, place, and situation.

Identify activities, positioning, postures, and assistive devices that aggravate or relieve pain, can produce associated skin trauma, or other disturbed sensations.

Identify pain behavior, soreness, and reaction during specific movements or activities.

Utilize established questionnaires, graphs, behavioral scales, or visual analog scale for pain.

Demonstrate proper body mechanics during all techniques learned in this course.

Inspect and measure physical environment in preparation for bed mobility, transfers and gait.

Demonstrate proper care and handling of various types of medical equipment (bed pans, IVs, catheters, etc.) and be able to discuss the alternatives.

Identify patients soft tissue restrictions utilizing passive range of motion.

Identify safety factors while performing transfers, gait, locomotion, wheelchair management and mobility with and without assistive devices.

Provide patient assistance during bed mobility, wheelchair mobility, transfers, gait and locomotion, using proper technique.

Discuss and demonstrate proper use of the tilt table.

Demonstrate proper wheelchair management and mobility.

Assess the patients and/or caregivers ability to care for their assistive device(s).

Measure appropriate components of assistive devices.

Identify normal and abnormal gait characteristics and patterns with and without assistive devices.

Identify the affects of various terrains, differing environments on patients gait and locomotion.

Identify present and potential barriers and possible modifications for the environment, home, and/or work.

Determine the need for adaptive/assistive devices for transfers, gait and locomotion, self-care, and home management techniques through communication and observation and offer recommendations.

Discuss physiological benefits and identify adverse responses to connective and soft tissue massage techniques.

Demonstrate, safely and correctly, a variety of manual therapy techniques to mobilize connective and soft tissues.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Students will assessed on a series of written exams, lab checkoffs, lab practical, written assignments and a final exam
General Course Requirements and Recommendations
Students must pass this course with a "B-" or better to remain in the PTA Program. They must also pass at least one of the written exams with an 80% or higher in order to pass this course. For each written exam the student does not pass, he/she will also be required to complete a written review of the exam to be submitted to the instructor prior to taking the final exam. Students must demonstrate competence in all of the lab checkoffs and practicals, according to the PTA program student handbook.

Instructors (or their designees) reserve the right to require students to provide picture identification for test taking, graded papers or projects or other appropriate purposes.

Grading Scale
Students will be assessed on the following scale:

- 99-100% = A+
- 93-98.9% = A
- 90-92.9% = A-
- 87-89.9% = B+
- 83-86.9% = B
- 80-82.9% = B-
- 76-79.9% = C+
- 70-75.9% = C
- 60-69.9% = D
- <60% = E

Texts
To be determined by Program Faculty

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for PTA 110

PTA118 - Exercise Techniques I

Overview

Subject
Physical Therapy Assistant

Academic Department
Health, Education, and Human Services

School
Health & Human Services

Course Description
Provides instruction in therapeutic exercise procedures utilized by physical therapist assistants. Topics include assessment of joint motion and muscle strength, implications of range of motion (ROM) and muscle testing for exercise prescription, types of exercise, basic exercise programs, and the use of exercise equipment. Theory only-no lab activities.

Course Pre-requisite(s)
PTA102 Intro to PT Practice, PTA110 Therapeutic Techniques PTA I, PTA132 Kinesiology for PTA's, and PTA168 Dev Across Lifespan for PTAs

Course Co-requisite(s)
PTA122 Exercise Techniques Lab

Credit Hours
2

Total Contact Hours
Total Instructor Contact Hours:
32

Total Student Contact Hours:
32

Course Fee
25

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. General Information Regarding ROM and manual muscle testing (MMT)
2. ROM Exercise
3. Strengthening Exercise
4. Aerobic Exercise
5. Joint Mobility
6. Balance and Coordination Activities
7. Specialty Exercise: Aquatic
8. Specialty Exercise: Obstetrics
9. Posture and Postural Dysfunction Treatment
10. Genitourinary System Interventions

Explain the process of assessing range of motion, strength, and flexibility including the functional applications.

Describe normal and abnormal movement of the peripheral joint or extremity during the performance of specific movement tasks.

Classify muscle, joint, and soft tissues characteristics and identify restrictions as related to peripheral joint mobility, range of motion, and muscle strength/power/ endurance.

Describe the theory and rationale for soft tissue mobilization and non-thrust peripheral joint mobilization.

Discuss principles, purposes, indications, contraindications, precautions, and effects of various types of therapeutic exercise including: aerobic endurance, aquatic, balance and coordination, conditioning/ reconditioning, postural awareness training, strengthening- active, active assistive, and all types of resistive, and stretching.

Define proper management for the cardiac-compromised patient and the obstetrical patient.

Discuss rationale for and describe the appropriate use of various types of therapeutic exercise equipment.

Identify types of established exercise protocols used and recognize the impact of abnormal results on the physical therapy plan of care.

Identify factors affecting patient motivation during treatment and with home exercise programs.

Identify barriers in environment, home or work that may impact exercise instruction.

Identify compensatory head, trunk and/or limb movement during ROM/ strength assessment and therapeutic exercise.

Evaluate a journal article for conciseness, accuracy, and effectiveness of research and application to physical therapy practice.

Develop interventions to address muscle impairments based on postural assessment.

Assessment, Requirements, and Outcomes

- Explain cardiopulmonary system physical therapy interventions and their applications for rehabilitation including bladder program, biofeedback, assessment of cognition

Assessment of Academic Achievement
Students will be assessed through a series of written exams, written assignments, case presentations, and a final written exam.

General Course Requirements and Recommendations
Students must pass this course with a "B-" or better to remain in the PTA Program. They must also pass at least one of the written exams, with 80% or higher, in order to pass this course. For each written exam the student does not pass, he/she will also be required to complete a written review of the exam to be submitted to the instructor prior to taking the final exam.

Instructors (or their designees) reserve the right to require students to provide picture identification for test taking, graded papers or projects or other appropriate purposes.

Grading Scale
Students will be assessed on the following scale:

- 99-100% = A+
- 93-98.9% = A
- 90-92.9% = A-
- 87-89.9% = B+
- 83-86.9% = B
- 80-82.9% = B-
- 76-79.9% = C+
- 70-75.9% = C
- 60-69.9% = D
- <60% = E

Texts
To be determined by program faculty

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for PTA 118

PTA122 - Exercise Techniques Lab

Overview

Subject
Physical Therapy Assistant

Academic Department
Health, Education, and Human Services

School
Health & Human Services

Course Description
Provides the opportunity for application of the techniques learned in PTA 118. Focuses on therapeutic exercise procedures utilized by physical therapist assistants as well as assessment of joint motion and muscle strength, implications of range of motion (ROM) and muscle testing for exercise prescription, types of exercise, basic exercise programs, and the use of exercise equipment. Guided lab setting.

Course Pre-requisite(s)
PTA102 Intro to PT Practice, PTA110 Therapeutic Techniques PTA I, PTA132 Kinesiology for PTA's, and PTA168 Dev Across Lifespan for PTAs

Course Co-requisite(s)
PTA118 Exercise Techniques I

Credit Hours
2

Total Contact Hours
Total Instructor Contact Hours:
62

Total Student Contact Hours:
62

Course Fee
45

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Review of Bony Landmarks and Muscle Actions
2. Against Gravity/Gravity Eliminated Motions
3. Use of Manual Contacts
4. Hip Assessment and Exercise
5. Knee Assessment and Exercise
6. Ankle Assessment and Exercise
7. Foot Assessment and Exercise
8. Scapula/Shoulder Assessment and Exercise
9. Elbow/Forearm Assessment and Exercise
10. Wrist/Hand Assessment and Exercise
11. Cervical assesment and exercise
12. Lumbar Assessment and Exercise
13. Balance and Coordination
14. Aerobic Exercise
15. Aquatic Exercise
16. Obstetrical Exercise
17. Postural Dysfunction Intervention
18. Body Composition

Measure range of motion (including muscle length) both functionally and by using a goniometer, tape measure, flexible ruler, and inclinometer.

Measure muscle strength, power, and endurance both functionally and by manual muscle testing or dynamometry.

Identify the various states of muscle tone and mass and the impact of pain and soreness during ROM/strength assessment and therapeutic exercise.

Design and teach an exercise program, within the Physical Therapist (PT) plan of care, for a simulated patient, including selection of exercise, progression of exercise and assembling a home program.

Use various types of therapeutic exercise equipment, with appropriate rationale.

Measure perceived exertion, dyspnea, or angina during activity using Rated Perceived Exertion (RPE) scale, dyspnea scale, anginal scale, or visual analog scale.

Measure anthropometric characteristics of height, weight, and body fat composition.

Identify factors affecting patient motivation during treatment and with home exercise programs.

Modify exercise instruction based on patients ability to process commands.

Manage barriers in environment, home, or work that may impact exercise instruction and make recommendations for modification.

Identify compensatory head, trunk and/or limb movement during ROM/ strength assessment and therapeutic exercise.

Measure residual limb and/or adjacent segment for range of motion and strength.

Develop interventions to address muscle impairments based on postural assessment.

Assess vital signs before, during, and after exercise.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Students will be assessed through a series of lab practicals, class demonstrations, and a final comprehensive lab practical.
General Course Requirements and Recommendations
Students must pass this course with a "B-" or better to remain in the PTA Program. They must also demonstrate competence on all lab practicals according to the PTA Program Student Handbook. Instructors (or their designees) reserve the right to require students to provide picture identification for test taking, graded papers or projects or other appropriate purposes.

Grading Scale
Students will be assessed on the following scale:

- 99-100% = A+
- 93-98.9% = A
- 90-92.9% = A-
- 87-89.9% = B+
- 83-86.9% = B
- 80-82.9% = B-
- 76-79.9% = C+
- 70-75.9% = C
- 60-69.9% = D
- <60% = E

Texts
To be determined by the Program Faculty

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for PTA 122

PTA132 - Kinesiology for PTA's

Overview

Subject
Physical Therapy Assistant

Academic Department
Health, Education, and Human Services

School
Health & Human Services

Course Description
Reviews surface anatomy and functional anatomy, muscles and muscle function, proper posture and analysis of posture, and gait analysis and deviations. Medical Terminology is reinforced. A lab component familiarizes the student with functional aspects of human motion.

Course Pre-requisite(s)
Admission to Physical Therapy Assistant AAS Degree (PTA) Program

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
69.5

Total Student Contact Hours:
69.5

Course Fee
25

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Kinesiology basics: Bones, Palpation
2. Joints
3. Muscles
4. Biomechanics
5. Arthrokinematics / Osteokinematics
6. 2 - Joint Muscles
7. Lower Extremity Concepts
8. Upper Extremity Concepts
9. TMJ Concepts
10. Spine Concepts
11. Nervous System
12. Posture
13. Gait

Describe concepts related to osteokinematics, arthrokinematics, and kinetics.

Apply principles of motion and biomechanics as they relate to the human body.

Define anatomical position, planes, and axes and their relationship.

Describe and differentiate the structures of a joint.

Classify and locate the various types of articulations in the body and demonstrate all joint movements.

Define tendons, ligaments, fascia, origins, and insertions.

Identify attachments, actions, and innervations for selected muscles of the body.

Relate gross anatomical muscle and bony structures to surface anatomy.

Identify and locate selected bony landmarks and muscles on classroom models.

Identify the various types of muscle contractions.

Distinguish the cooperative action of muscles in controlling joint motions.

Recognize normal and abnormal alignment of trunk and extremities at rest.

Describe resting posture in any position.

Describe the sensory and motor parts of a neuron, neuromuscular junction, and a synapse.

Differentiate the neural and muscular components of selected reflexes as well as the function and control of the reflex.

Define normal and abnormal muscle tone.

Compare and contrast upper and lower motor neuron lesions including their effect on reflexes and muscle tone.

Identify normal and abnormal gait characteristics.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of academic achievement will include written exams, lab exams, one final written exam, one final lab exam, and various homework assignments.
General Course Requirements and Recommendations
Students must pass this course with a "B-" or better to remain in the PTA Program. They must also pass at least one of the written exams, with 80% or higher, and one of the lab exams, with 80% or higher, in order to pass this course. For each written exam the student does not pass, he/she will also be required to complete a written review of the exam to be submitted to the instructor prior to taking the final exam.

Instructors (or their designees) reserve the right to require students to provide picture identification for test taking, graded papers or projects or other appropriate purposes.

Grading Scale
Students grades will be assigned using the following scale:

- 99-100% = A+
- 93-98.9% = A
- 90-92.9% = A-
- 87-89.9% = B+
- 83-86.9% = B
- 80-82.9% = B-
- 76-79.9% = C+
- 70-75.9% = C
- 60-69.9% = D
- <60% = E

Texts
To be determined by the program faculty.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for PTA 132

PTA144 - Physical Therapy Modalities

Overview

Subject
Physical Therapy Assistant

Academic Department
Health, Education, and Human Services

School
Health & Human Services

Course Description
Covers the principles, indications, contraindications, and precautions of physical agents including heat, cold, water, electrical stimulation, traction, light, and sound. Guided laboratory setting.

Course Pre-requisite(s)
PTA102 Intro to PT Practice, PTA110 Therapeutic Techniques PTA I, PTA132 Kinesiology for PTA's, and PTA168 Dev Across Lifespan for PTAs

Credit Hours
2

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
55

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Electrical Stimulation: TENS, NMES, Hi-Volt, IFC / Pre-mod, and Iontophoresis
2. Ultrasound
3. Intermittent Compression
4. Traction
5. Superficial Thermal Modalities
6. Hydrotherapy
7. Specialty Modalities: UV, Unfrared, Laser, and Diathermay
8. Lymphatic System: Tests and Measures and Interventions

Describe the effects (both generalized and localized), indications, contraindications, and precautions for the therapeutic use of various forms of heat and cold.

Describe the effects (both generalized and localized), indications, contraindications, and precautions for the therapeutic use of all types of electrical stimulation.

Describe the effects, indications, contraindications, precautions, and principles associated with the therapeutic use of ultraviolet, infrared, diathermy, and hydrotherapy.

Describe the neurophysiological principles of pain perception and the treatment of pain with TENS and other forms of electrical stimulation.

Explain the different kinds of electrical currents, their characteristics including waveform, and the uses of each.

Implement safety measures to be used in the application of all various types of therapeutic agents.

Assess integumentary integrity by the following: performing gross sensory tests to identify intact or impaired sensation, observation of continuity of skin color and nail beds, comparison of skin temperature, and identification of tissue mobility/turgor/texture.

Measure anthropometric characteristics of edema through girth, volumetrics and palpation.

Demonstrate an acceptable level of skill in the application (accurate, safe, effective, and timely) of these selected therapeutic agents: selected types of electrical stimulation, ultrasound/phonophoresis, mechanical traction (both cervical and lumbar), and thermal agents (HP/CP).

Monitor patients response to treatment prior to, during, and immediately following the application of therapeutic agents.

Evaluate a journal article for conciseness, accuracy, and effectiveness of research and application to physical therapy practice.

Identify tests and measures used in assessing the lymphatic system.

Describe lymphatic system physical therapy interventions and their application in rehabilitation.

Describe the physical properties and effects of diathermy, electromagnetic radiation, ultrasound, and ultraviolet radiation.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
The assessment standards will consist of written exams, lab checkoffs, one final written exam, and one final comprehensive lab exam.
General Course Requirements and Recommendations
Students must pass this course with a "B-" or better to remain in the PTA Program. They must also pass at least one of the written exams and one of the lab exams in order to pass this course. For each written exam the student does not pass, he/she will also be required to complete a written review of the exam to be submitted to the instructor prior to taking the final exam.

Instructors (or their designees) reserve the right to require students to provide picture identification for test taking, graded papers or projects or other appropriate purposes.

Grading Scale
Students will be assessed on the following scale:

- 99-100% = A+
- 93-98.9% = A
- 90-92.9% = A-
- 87-89.9% = B+
- 83-86.9% = B
- 80-82.9% = B-
- 76-79.9% = C+
- 70-75.9% = C
- 60-69.9% = D
- <60% = E

Texts
To be determined by Program Faculty

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for PTA 144

PTA168 - Developmen Across the Lifespan for PTAs

Overview

Subject
Physical Therapy Assistant

Academic Department
Health Careers

School
Health & Human Services

Course Description
Examines the normal gross motor development of humans from infancy on. Relates early developmental sequence and reflexive maturation to rehabilitation techniques utilized with adult patients. Discusses the development of adults, the aging process, and death and dying. Psychosocial and cognitive issues throughout the life span are integrated in human development.

Course Pre-requisite(s)
Admission into the Physical Therapy Assistant AAS Degree (PTA) Program

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
20

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Mental function/Culture/Lifespan Communication
2. Prenatal Development and the Newborn
3. Infancy
4. Preschool, Middle Childhood
5. Adolescence
6. Transition to Adulthood
7. Adulthood
8. Aging and Disablement in Adulthood
9. Death and Dying
10. Environmental Contexts and Wellness
11. Assessment of Human Performance
12. Disability Throughout the Lifespan

Identify the concepts and principles of growth and development.
Identify the causative factors in congenital anomalies.
Identify and describe developmental milestones including postural, righting, and equilibrium reactions.
Report infants basic performance level and attainment of developmentally appropriate reflexes through observation of instrumental activities of daily living, adaptive skills, and play.
Identify the sequence and function of motor development.
Explain the relationship of normal reflex movement to gross motor development.
Describe the acquisition of language and cognitive abilities.
Discuss the theories of growth, development, and aging.
Describe the psychosocial and mental aspects throughout the lifespan.
Describe the physical changes associated with aging.
Discuss the impact of the special problems facing the elderly including chronic illnesses, long-term care, and victimization.
Discuss communication modification required due to aging and chronic illness.
Describe the stages in death and dying as outlined by Elizabeth Kubler-Ross.
Compare the Life Span perspective of development to more traditional approaches to development.
Develop an awareness and better understanding of his/her own feeling toward death and dying.
Recognize the impact of disability on individuals and their family/social relations throughout the lifespan.

Perform components of data collection using appropriate tests and measures regarding mental health aspects in physical therapy interventions across the life span.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
The assessment standards will consist of quizzes and written exams, a midterm and final written exam, individual and group projects incorporating written information and presentations, classroom and online assignments and discussions.

General Course Requirements and Recommendations
Students must pass this course with a "B-" or better to remain in the PTA Program. The student must pass either the midterm or the final exam with at least an 80% in order to pass this course. For each written exam the student does not pass, he/she will also be required to complete a written review of the exam to be submitted to the instructor prior to taking the final exam. Instructors (or their designees) reserve the right to require students to provide picture identification for test taking, graded papers or projects or other appropriate purposes.
Grading Scale
Students will be assessed on the following scale:

- 99-100% = A+
- 93-98.9% = A
- 90-92.9% = A-
- 87-89.9% = B+
- 83-86.9% = B
- 80-82.9% = B-
- 76-79.9% = C+
- 70-75.9% = C
- 60-69.9% = D
- <60% = E

Texts
To be determined by program faculty.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for PTA 168

PTA225 - Applied Pathology for PTAs

Overview

Subject
Physical Therapy Assistant

Academic Department
Health, Education, and Human Services

School
Health & Human Services

Course Description
Examines the signs, symptoms, etiology, course, prognosis, medical intervention, and treatment of diseases with an emphasis on diseases commonly encountered in physical therapy. Medical Terminology will be reinforced. Also highlights patient care with emphasis on physical therapy interventions relevant to the body system involved in various pathologies. Topics include aseptic technique and wound care, cardiac rehabilitation and chest physiotherapy (CPT), and selected manual therapy techniques. Guided lab setting.

Course Pre-requisite(s)
BIO234 Anatomy and Physiology II (with a C or better), PTA102 Intro to PT Practice, PTA110 Therapeutic Techniques PTA I, PTA168 Dev Across Lifespan for PTAs, and PTA132 Kinesiology for PTA's

Credit Hours
4

Total Contact Hours
Total Instructor Contact Hours:
62

Total Student Contact Hours:
62

Course Fee
40

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Biopsychosocial and Environmental aspects of Pathology
2. Immune System
3. Infectious diseases
4. Handwashing / Universal Precautions
5. Integumentary System: Tissue Healing
6. Integumentary System: Skin Disease, Burns, Ulcers
7. Integumentary System: Wound Care / Sterile Procedures
8. Cardiopulmonary System: Cardiovascular System
9. Cardiopulmonary System: Respiratory System
10. Cardiopulmonary System: Vital Signs
11. Cardiopulmonary System: Chest PT
12. Neuromuscular System: Nervous System, Neuroanatomy
13. Neuromuscular System: Cerebrovascular Accident (CVA), Traumatic Brain Injury (TBI)
14. Neuromuscular System: Spinal Cord Injury (SCI), Epilepsy, Degenerative Diseases
15. Musculoskeletal Skystem: Diseases, Disorders
16. Other Systems: Hepatic
17. Other Systems: Endocrine
18. Other Systems: Oncology
19. Other Systems: Hematology

Identify organs and describe the functions of selected organ systems.

Use common prefixes, suffixes, and terminology in describing the pathology of various diseases, trauma, and/or their development.

Describe the changes in the body in response to cellular injury, acute and chronic inflammation, and bacterial/viral/fungal infections.

Describe the etiology, pathology, signs, symptoms, prognosis, diagnosis, and treatment of various diseases.

Discuss epidemiologic factors (incidence, disease outcomes, and risk factors) for selected pathologic conditions.

Discuss environmental factors and their role in the development of certain pathologic conditions.

Demonstrate an understanding of the biopsychosocial aspects of health care and their effect on disease processes.

Explain stress and its impact on health conditions and identify interventions in physical used in stress management.

Describe the clinical manifestations and clinical implications of selected psychopathologic disorders across the life span including but not limited to schizophrenia, bipolar disorder, organic brain syndrome, phobias, and conversion disorders.

Describe the role of physical therapy intervention, specifically the role of the Physical Therapist Assistant (PTA), on commonly seen pathologic disorders across the life span.

Describe an actual patients experience with a pathologic disorder through an interview process.

Define normal ranges for vital signs of infants, children, and adults at rest.
Identify the factors that may cause vital signs to vary at rest and during activity.
Demonstrate the ability to obtain accurate measures of the following vitals- radial pulse, carotid pulse, blood pressure, respiratory rate, and pulse oximetry at rest, during or after activity.
Differentiate normal from abnormal cardiopulmonary responses during Activities of Daily Living (ADLs), Instrumental Activities of Daily Living (IADLs), and exercise and identify and respond to signs of distress.
Identify autonomic responses of papillary reactions, alertness, heart rate, blood pressure, respiratory rate, nausea, and diaphoresis to positional changes.
Identify normal and abnormal thoracoabdominal movements, breathing patterns, and cough with activity and at rest, through observation without the use of a stethoscope.
Perform and instruct patient in proper and safe airway clearance techniques including cough, chest PT, and breathing strategies.
Identify normal and abnormal characteristics of the integumentary system and wounds through observation and report.
Identify activities, positioning, postures, and adaptive devices that aggravate the skin/wound/scar or can produce additional skin trauma.
Identify various types and characteristics of burns, pressure sores and other wounds.
Suggest assistive and adaptive devices to protect wounds and promote healing and apply these devices correctly and safely.
Apply and remove selective dressings or agents including identifying precautions for dressing removal and types of debridement.
Explain the rationale of standard precautions in infection control.
Demonstrate sterile techniques and proper procedure for handwashing.
Review medical health record and identify normal and abnormal lab values.
Identify the impact of pharmacology used to treat the cardiovascular, pulmonary, and metabolic systems on physical management.
Describe nonpharmacological medical management of the cardiovascular, pulmonary, and metabolic systems including diagnostic imaging and other medical tests.
Describe pain (acute and chronic) and identify pain management interventions utilized in physical therapy.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
The assessment standard will consist of written exams, various class projects, written assignments, check-offs, a written final exam, and a comprehensive lab exam.
General Course Requirements and Recommendations
Students must pass this course with a "B-" or better to remain in the PTA Program. They must also pass at least one of the written exams, with 80% or higher, in order to pass this course. Students must demonstrate competence in all lab check-offs according to the PTA Program Student Handbook. For each written exam the student does not pass, he/she will also be required to complete a written review of the exam to be submitted to the instructor prior to taking the final exam.

Students must complete BIO234 Anatomy and Physiology II or equivalent to be enrolled in this course.

Instructors (or their designees) reserve the right to require students to provide picture identification for test taking, graded papers or projects or other appropriate purposes.

Grading Scale
Students will be assessed on the following scale:

- 99-100% = A+
- 93-98.9% = A
- 90-92.9% = A-
- 87-89.9% = B+
- 83-86.9% = B
- 80-82.9% = B-
- 76-79.9% = C+
- 70-75.9% = C
- 60-69.9% = D

Texts
To be determined by program faculty.

- <60% = E

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for PTA 225

PTA250 - Extremity Orthopedics

Overview

Subject
Physical Therapy Assistant

Academic Department
Health, Education, and Human Services

School
Health & Human Services

Course Description
Presents the etiology, course, prognosis, medical intervention, and treatment of orthopedic conditions of the extremities. Includes physical therapy intervention. Guided lab setting.

Course Pre-requisite(s)
PTA118 Exercise Techniques I, PTA122 Exercise Techniques Lab, PTA144 Physical Therapy Modalities, and PTA225 Applied Pathology for PTAs

Credit Hours
4

Total Contact Hours

Total Instructor Contact Hours:
77

Total Student Contact Hours:
77

Course Fee
15

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Pathology and Treatment Principles
2. Tissue Healing
3. Functional Assessment and Training
4. Closed Kinetic Chain
5. Gait
6. Balance
7. Shoulder Injuries and Treatment
8. Elbow Injuries and Treatment
9. Wrist/Hand Injuries and Treatment
10. Palpation and Special Tests Upper Extremity (U/E)
11. Hip Injuries and Treatment
12. Knee Injuries and Treatment
13. Ankle/Foot Injuries and Treatment
14. Palpation and Special Tests Lower Extremity (L/E)
15. Prevention of Injury
16. Manual Therapy
17. Orthotics and Prosthetics
18. Amputation and Treatment
19. Pharmacology and Diagnostic Imaging

Describe the role of the Physical Therapist Assistant (PTA) in the management of musculoskeletal disorders.

Describe the properties of tendon, muscle, bone, ligament, and meniscus, as well as injury and repair of these tissues and practical considerations for rehabilitation.

Identify key clinical findings for various types of tissue lesions associated with orthopedic injuries of the extremities.

Analyze the effects of immobilization and degeneration on orthopedic injuries of the extremities.

Examine the biomechanics of all joints of the extremities and discuss its role in injury, treatment, and prevention of orthopedic injuries of the extremities.

Describe normal and abnormal alignment and movement of peripheral joints or extremities at rest and during specific movement tasks.

Compare and contrast hypo- and hypermobility of joints and identify the common treatments associated with each.

Differentiate the clinical manifestations, etiology, pathology, diagnosis, treatment, and prognosis of various orthopedic injuries of the extremities.

Identify various orthopedic congenital deformities of the extremities, the clinical manifestations, and management of these disorders.

Describe the common surgical procedures performed on each joint of the extremities including management and special precautions related to each procedure.

Describe the common evaluation procedures and special tests utilized by the physical therapist for patients with orthopedic injuries of the extremities and explain what the results of these tests indicate.

Recommend appropriate assistive, adaptive, or protective equipment for the patient with an orthopedic injury of the extremity, based on architectural barriers.

Assess physiological responses of patients with orthopedic injuries of the extremities during community/work/leisure activities, non-routine occurrences, and self-care and home management activities.

Assess components of safe community and work environments for patients with orthopedic injuries of the extremities with the goal of injury prevention.

Organize functional training programs for patients with an orthopedic injury of the extremity.

Demonstrate proper positioning, handling, and transferring of patients with orthopedic injuries of the extremities.

Instruct a patient with an orthopedic injury of the extremity in therapeutic exercise and functional activities for self-care, home management, community and work reintegration.

Recognize the effects of various terrains and differing environments on gait, locomotion, and balance of the patient with an orthopedic injury of the lower extremity.

Develop a treatment plan, within the PT plan of care, for various types of orthopedic injuries of the extremities progressing from first day of treatment through discharge including a home exercise program.

Provide functional training in self-care, home management, community, or work for patients with an extremity orthosis or prosthesis.

Demonstrate safe and proper technique for mobilization of selected soft tissues and non-thrust mobilization for selected peripheral joints.

Describe components of an extremity orthotic and prosthetic device and identify skin condition and safety while using the device.

Recommend, apply, and instruct patients in the use of orthotic or prosthetic devices and apparel correctly and safely and identify the ability of the patient to manage the orthotic or prosthetic device.

Describe immediate post-operation management of a patient with an amputation.

Identify the impact of pharmacology used to treat the musculoskeletal system on physical management.

Describe non pharmacological medical management of the musculoskeletal system including diagnostic imaging and other medical tests.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
The assessment standards will consist of written exams, quizzes, case studies, cumulative final written exam, and final lab practical.
General Course Requirements and Recommendations
Students must pass this course with a "B-" or better to remain in the PTA Program. They must pass at least one of the written exams, with at least an 80%. For each written exam the student does not pass, he/she will also be required to complete a written review of the exam to be submitted to the instructor prior to taking the final exam. Students must demonstrate competence in the lab practical according to the PTA Program Student Handbook, in order to pass this course. Failure to complete these standards will result in required remediation or dismissal from the PTA Program. Instructors (or their designees) reserve the right to require students to provide picture identification for test taking, graded papers or projects or other appropriate purposes.

Grading Scale
Students will be assessed on the following scale:

- 99-100% = A+
- 93-98.9% = A
- 90-92.9% = A-
- 87-89.9% = B+
- 83-86.9% = B
- 80-82.9% = B-
- 76-79.9% = C+
- 70-75.9% = C
- 60-69.9% = D
- <60% = E

Texts
To be determined by the program faculty.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for PTA 250

PTA254 - Spinal Orthopedics

Overview

Subject
Physical Therapy Assistant

Academic Department
Health, Education, and Human Services

School
Health & Human Services

Course Description
Presents the etiology, course, prognosis, medical intervention, and treatment of orthopedic conditions of the spine. Covers physical therapy intervention. Guided lab setting.

Course Pre-requisite(s)
PTA118 Exercise Techniques I, PTA122 Exercise Techniques Lab, PTA144 Physical Therapy Modalities, and PTA225 Applied Pathology for PTAs

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
62

Total Student Contact Hours:
62

Course Fee
15

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Anatomy and Biomechanics of the Spine
2. Neuorvascular Healing
3. Postural Assessment
4. Lumbar Spine: Disorders
5. Lumbar Spine: Palpation and Special Tests
6. Lumbar Spine: Treatment
7. Lumbar Spine: Mobility
8. Lumbar Spine: Stability
9. Pelvic Girdle and Hip: Disorders
10. Pelvic Girdle and Hip: Palpation and Special Tests
11. Pelvic Girdle and Hip: Treatment
12. Cervical Spine: Disorders
13. Cervical Spine: Palpation and Special Tests
14. Cervical Spine: Treatment
15. Cervical Spine: Mobility
16. Cervical Spine: Stability
17. Temporalmandibular Joint (TMJ): Disorders
18. TMJ: Palpation and Special Tests
19. TMJ: Treatment
20. Thoracic Spine: Disorders
21. Thoracic Spine: Treatment
22. Manual Therapy Techniques
23. Discharge Planning
24. Pharmacology and Diagnostic Imaging

Identify key clinical findings for various types of tissue lesions associated with orthopedic injuries of the spine.

Analyze the effects of immobilization and degeneration on orthopedic injuries of the spine.

Describe normal and abnormal alignment and movement of the head and trunk at rest and during specific movement tasks.

Assess and identify postural abnormalities and asymmetry on a mock patient.

Differentiate the clinical manifestations, etiology, pathology, diagnosis, treatment, and prognosis of various orthopedic injuries of the spine including chronic pain as well as the TMJ.

Identify various orthopedic congenital deformities of the spine, the clinical manifestations, and management of these disorders.

Describe the common surgical procedures for the spine including management and special precautions related to each procedure.

Describe the common evaluation procedures and special tests utilized by the physical therapist for patients with an orthopedic injury of the spine and pelvic girdle. Explain what the results of these tests indicate.

Describe how to perform a claudication time test for a non-complex patient.

Recognize architectural barriers and recommend appropriate assistive, adaptive, or protective equipment for the patient with an orthopedic injury of the spine.

Observe the performance level of a spinal orthopedic patient with respect to adaptive skills, community/work/leisure activities, environmental and work tasks, and self-care and home management activities with or without the use of devices or equipment.

Recognize physiological responses of patients with an orthopedic injury of the spine during community/work/leisure activities, nonroutine occurrences, and self-care and home management activities.

Recognize components of safe community and work environments for patients with an orthopedic injury of the spine with the goal of injury prevention.

Develop and present an instructional training program (such as body mechanics and postural awareness training) to prevent an orthopedic injury of the spine.

Demonstrate proper positioning, handling, and transferring of patients with an orthopedic injury of the spine.

Instruct spinal orthopedic patients in therapeutic exercise and functional activities for self-care, home management, community and work reintegration.

Develop a treatment plan, within the Physical Therapist (PT) plan of care, for various types of orthopedic injuries of the spine progressing from first day of treatment through discharge including a home exercise program.

Provide functional training in self-care, home management, community, or work for patients with a spinal orthosis.

Develop appropriate interventions for patients with spinal conditions and TMJ disorders based upon the PT plan of care.

Identify the impact of pharmacology used to treat the musculoskeletal system on physical management.

Describe non pharmacological medical management of the musculoskeletal system including diagnostic imaging and other medical tests.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
The assessment standards will consist of written exams, quizzes, written assignments, case studies, group presentation, cumulative final written exam, and final lab practical.

General Course Requirements and Recommendations
Students must pass this course with a "B-" or better to remain in the PTA Program. They must pass at least one of the written exams, with at least an 80%. For each written exam the student does not pass, he/she will also be required to complete a written review of the exam to be submitted to the instructor prior to taking the final exam. Students must demonstrate competence in the lab practical according to the PTA Program Student Handbook, in order to pass this course. Failure to complete these standards will result in required remediation or dismissal from the PTA Program.

Instructors (or their designees) reserve the right to require students to provide picture identification for test taking, graded papers or projects or other appropriate purposes.

Grading Scale
Students will be assessed on the following scale:

- 99-100% = A+
- 93-98.9% = A
- 90-92.9% = A-
- 87-89.9% = B+
- 83-86.9% = B
- 80-82.9% = B-
- 76-79.9% = C+
- 70-75.9% = C
- 60-69.9% = D
- <60% = E

Texts
To be determined by program faculty.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for PTA 254

PTA262 - Rehabilitation of Neurological Cond 1

Overview

Subject
Physical Therapy Assistant

Academic Department
Health, Education, and Human Services

School
Health & Human Services

Course Description
Reviews basic neuroanatomy and neurophysiology followed by instruction in the theory and rationale of the treatment approach for the patient with neurological involvement. Emphasizes the functional approach to patient treatment including use of Neurodevelopmental Treatment (NDT) and Proprioceptive Neuromuscular Facilitation (PNF) for adults with neurological conditions such as traumatic brain injury and cerebrovascular accidents.

Course Pre-requisite(s)
PTA118 Exercise Techniques I, PTA122 Exercise Techniques Lab, PTA144 Physical Therapy Modalities, and PTA225 Applied Pathology for PTAs

Course Co-requisite(s)
PTA265 Rehab Neuro Conditions Lab

Credit Hours
2

Total Contact Hours
Total Instructor Contact Hours:
32

Total Student Contact Hours:
32

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Neuroanatomy
2. Neurologic Assessment
3. Sensory System
4. Coordination
5. Balance
6. Functional Assessment
7. Facilitation/ Inhibition
8. Motor Control / Motor Learning
9. NDT
10. PNF
11. Architectural Barriers
12. Wheelchair Management
13. Home Management Plan
14. Family Instruction / Education
15. Cerebrovascular Accident (CVA)
16. Traumatic Brain Injury (TBI)
17. Spinal Cord Injury (SCI)
18. Pediatric Perspectives
19. Other Neurological Disorders
20. Pharmacology and Diagnostic Imaging

Identify the major components of the central and peripheral nervous systems.

Describe the clinical significance of injury and/or dysfunction in the major components of the central and peripheral nervous systems.

Explain the motor and sensory involvement in various neurological conditions.

Identify changes in muscle tone and mass.

Recognize a patients response to both auditory and visual stimuli as part of a thorough assessment of cranial nerve integrity.

Recognize the speech, language, and cognitive problems, which may occur secondary to various neurological conditions including expressive and receptive abilities/deficits.

Recognize changes in the direction and magnitude of a neurological patients state of arousal, attention, mentation, cognition, and level of recall.

Compare and contrast the physical involvement of patients with paraplegia and quadriplegia.

Demonstrate knowledge of specific neurological conditions with respect to etiology, physical problems, tests and measures, and treatment techniques appropriate to those conditions.

Recognize architectural barriers and recommend appropriate adaptive or protective equipment for the neurological patient.

Describe a neurological patients performance level with respect to adaptive skills, community/work/leisure activities, environmental and work tasks, and self-care and home management activities with or without use of devices or equipment.

Recognize head, trunk, and limb movement during specific movement tasks and identify stereotypic movements and postural/righting/ equilibrium reactions including recognition of gross and fine motor skills.

Demonstrate knowledge of sensory changes, balance, and coordination.

Recognize activities, positioning, postures, and assistive and adaptive devices that can produce associated skin trauma or aggravate wounds/ scars for the neurological patient.

Recognize physiological responses of neurological patients during community, work, and leisure activities, non-routine occurrences, and self-care and home management activities.

Recognize components of safe community and work environments for the neurological patient.

Demonstrate knowledge of basic NDT and PNF principles.

Demonstrate knowledge about proper positioning, handling, and transferring of patients with neurological conditions.

Demonstrate proper documentation of rehabilitation procedures for neurological patients.

Recognize the effects of various terrains and differing environments on a neurological patients gait, locomotion, and balance.

Write home programs and instruct patients and families in the execution of home programs for the neurologically impaired clients.

Identify the impact of pharmacology used to treat the neuromuscular and nervous systems on physical management.

Describe nonpharmacological medical management of the neuromuscular and nervous systems including diagnostic imaging and other medical tests.

Perform components of data collection for appropriate tests and measures as it relates to mental health aspects in neurological rehabilitation.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
The assessment standards will consist of written exams, written final exam, written assignments, case studies, and presentations.
General Course Requirements and Recommendations
Students must pass this course with a "B-" or better to remain in the PTA Program. They must also pass at least one of the written exams, with an 80% or higher, in order to pass this course. For each written exam the student does not pass, he/she will also be required to complete a written review of the exam to be submitted to the instructor prior to taking the final exam.

Instructors (or their designees) reserve the right to require students to provide picture identification for test taking, graded papers or projects or other appropriate purposes.

Grading Scale
Students will be assessed on the following scale:

- 99-100% = A+
- 93-98.9% = A
- 90-92.9% = A-
- 87-89.9% = B+
- 83-86.9% = B
- 80-82.9% = B-
- 76-79.9% = C+
- 70-75.9% = C
- 60-69.9% = D
- <60% = E

Texts
To be determined by the program faculty.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for PTA 262

PTA265 - Rehab of Neurological Conditions Lab

Overview

Subject
Physical Therapy Assistant

Academic Department
Health, Education, and Human Services

School
Health & Human Services

Course Description
Applies techniques learned in PTA-262 with an emphasis on the functional approach to patient treatment. Includes the use of Neurodevelopmental Treatment (NDT) and Proprioceptive Neuromuscular Facilitation (PNF) for adults with neurological conditions such as traumatic brain injury (TBI) and cerebrovascular accidents (CVAs). Guided laboratory setting.

Course Pre-requisite(s)
PTA144 Physical Therapy Modalities, PTA118 Exercise Techniques I, PTA122 Exercise Techniques Lab, PTA225 Applied Pathology for PTAs

Course Co-requisite(s)
PTA262 Rehab Neurological Cond 1

Credit Hours
2

Total Contact Hours
Total Instructor Contact Hours:
60

Total Student Contact Hours:
60

Course Fee
35

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Neuroanatomy
2. Neurologic Assessment
3. Sensory Assessment
4. Coordination Assessment and Treatment
5. Balance Assessment and Treatment
6. Functional Assessment Tools
7. Assessment of Motor Function
8. Facilitation / Inhibition Techniques
9. NDT
10. PNF
11. CVA Treatment Intervention
12. Architectural Barriers
13. Wheelchair Management Training
14. Home Management Plan
15. Family Instruction / Education
16. TBI Treatment Intervention
17. Spinal Cord Injury (SCI) Treatment Intervention
18. Pediatric Treatment Interventions
19. Other Neurological Disorders

Describe the clinical significance of injury and/or dysfunction in the major components of the central and peripheral nervous system.

Identify changes in muscle tone and mass.

Recognize a patients response to both auditory and visual stimuli as part of a thorough assessment of cranial nerve integrity.

Recognize the speech, language, and cognitive problems, which may occur secondary to various neurological conditions including expressive and receptive abilities/deficits.

Recognize changes in the direction and magnitude of a neurological patients state of arousal, attention, mentation, cognition, and level of recall.

Determine a neurological patients ability to process commands.

Compare and contrast the physical involvement of patients with paraplegia and quadriplegia.

Administer standard questionnaires and conduct interviews regarding Activities of Daily Living (ADLs), Instrumental Activities of Daily Living (IADLs) and environmental/home/ work barriers with patients and others.

Recognize architectural barriers and recommend appropriate adaptive or protective equipment for the neurological patient.

Identify a neurological patients performance level with respect to the need for adaptive skills for community/work/leisure activities, environmental and work tasks, and self-care and home management activities with or without use of devices or equipment.

Recognize head, trunk, and limb movement during specific movement tasks and identify stereotypic movements and postural/righting/ equilibrium reactions including recognition of gross and fine motor skills, to incorporate into the treatment of the patient.

Assess sensation, balance, and coordination.

Recognize activities, positioning, postures, and assistive and adaptive devices that can produce associated skin trauma or aggravate wounds/ scars for the neurological patient.

Identify physiological responses of neurological patients during community, work, and leisure activities, non-routine occurrences, and self-care and home management activities and adapt treatment as needed.

Recognize components of a safe community and work environments for the neurologically impaired patient.

Demonstrate skill in performing basic NDT and PNF techniques.

Perform proper positioning, handling, and transferring of patients with neurological conditions.

Instruct a neurological patient in proper wheelchair management and mobility activities.

Instruct neurological patients in therapeutic exercise (such as neuromuscular re-education, perceptual training, sensory re-training) and functional activities for self-care, home management, community, and work re-integration.

Demonstrate proper documentation of rehabilitation procedures for neurological patients such as, mat activities, pre-gait and gait training activities, and balance and coordination activities.

Recognize the effects of various terrains and differing environments on a neurological patients gait, locomotion, and balance and adjust treatment and pt education as needed.

Perform a variety of functional assessments for the neurologically impaired patient.

Write home programs and instruct patients and families in the execution of home programs for the neurologically impaired clients.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
The assessment standards will consist of lab practical exams, lab exams, case studies, presentation, written assignments, and group activities.
General Course Requirements and Recommendations
Students must pass this course with a "B-" or better to remain in the PTA Program. Students must demonstrate competence in the lab practical according to the PTA Program Student Handbook, in order to pass this course. Failure to complete these standards will result in required remediation or dismissal from the PTA Program.

Instructors (or their designees) reserve the right to require students to provide picture identification for test taking, graded papers or projects, or other appropriate purposes.

Grading Scale
Students will be assessed on the following scale:

- 99-100% = A+
- 93-98.9% = A
- 90-92.9% = A-
- 87-89.9% = B+
- 83-86.9% = B
- 80-82.9% = B-
- 76-79.9% = C+
- 70-75.9% = C
- 60-69.9% = D
- <60% = E

Texts
To be determined by Program Faculty

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for PTA 265

PTA272 - Professional Issues in Physical Therapy

Overview

Subject
Physical Therapy Assistant

Academic Department
Health, Education, and Human Services

School
Health & Human Services

Course Description
This is intended to integrate classroom and clinical experiences. The course facilitates the transition of the PTA student to the PTA professional. Elements of professionalism are discussed including integrity in practice, advocacy, core and value-based behaviors, ethical principles and reasoning, and professional relationships with other health care professionals, the public, supervisors, PT's and clinical instructors. The course prepares the student PTA for a career in physical therapy including resume and cover letter writing, interviewing skills, educational opportunities, and continuing education. The course also offers preparation for the NPTE.

Course Pre-requisite(s)
PTA250 Extremity Orthopedics, PTA254 Spinal Orthopedics, PTA262 Rehab Neurological Cond 1, PTA265 Rehab Neuro Conditions Lab, and PTA291 Clinical Extern 1

Credit Hours
2

Total Contact Hours
Total Instructor Contact Hours:
32

Total Student Contact Hours:
32

Course Fee
240

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Practice Exam and Assessment Tool (PEAT)
2. Self-Assessment
3. Job Placement and Interviewing
4. Resume and Cover Letter Writing
5. Communication
6. Physical Therapist and Physical Therapist Relationship
7. Role of the Physical Therapist Assistant
8. Health Care Professional Roles
9. Reimbursement
10. Fraud, Waste, and Abuse in Physical Therapy Services
11. Laws and State Practice Act for Michigan
12. Continuing Education and Career Development
13. Licensure Exam Preparation

Identify the role of PTA's in the future of health care.
Compose a cover letter.
Write a formal resume.
Write a job description for a Physical Therapist Assistant.
Identify characteristics of a good job interview.
Explain the role of various persons in a typical physical therapy setting.
Analyze current reimbursement issues in physical therapy.
Discuss basic principles of management in a physical therapy setting, including policies and procedures, meetings, budget, and quality assurance.
Complete two pre-licensure practice tests in preparation of the national PTA licensure exam.
Understand the State practice act for Michigan.
Identify cases of fraud, waste, and abuse in the utilization of and payment for physical therapy services.
Identify career development opportunities and create a career plan for the next five years.
Review APTAs Values Based Behaviors for the PTA and complete VBB self-assessment.
Identify effective communication skills and describe how these skills are essential in the healthcare setting.
Completion of licensure examination preparation course.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
The assessment standards will consist of discussions, group activities, quizzes, written assignments, completion of two PEAT exams, and participation in NPTE review course.

General Course Requirements and Recommendations
Students must pass this course with a "C" or better to remain in the PTA program. They must complete all assignments as listed above in order to pass this course. Instructors (or their designee) reserve the right to require students to provide picture identification for test taking, graded papers or projects, or other appropriate purposes.

Grading Scale

- 99-100% = A+
- 93-98.9% = A
- 90-92.9% = A-
- 87-89.9% = B+
- 83-86.9% = B
- 80-82.9% = B-
- 76-79.9% = C+
- 70-75.9% = C
- 60-69.9% = D
- <60% = E

Texts
To be determined by program faculty.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for PTA 272

PTA291 - Clinical Externship 1

Overview

Subject
Physical Therapy Assistant

Academic Department
Health, Education, and Human Services

School
Health & Human Services

Course Description
A part-time, supervised clinical practicum at affiliated physical therapy departments. Students participate in patient treatment under the delegation and supervision of a licensed physical therapist. Students begin to integrate information from all previous course work to assist in those delegated components of patient care.

Course Pre-requisite(s)
PTA118 Exercise Techniques I, PTA122 Exercise Techniques Lab, PTA144 Physical Therapy Modalities, PTA225 Applied Pathology for PTAs

Credit Hours
2

Total Contact Hours
Total Instructor Contact Hours:
120

Total Student Contact Hours:
120

Course Fee
45

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Competencies outlined through the American Physical Therapy Association (APTA)
2. Roles of the Healthcare Team
3. Chart Review
4. The Physical Therapy Evaluation
5. Physical Therapist (PT)/Physical Therapist Assistant (PTA) Relationship
6. Physical Therapy Intervention
7. Data Collection
8. Ethical and Professional Behaviors

Demonstrate professional behaviors.
Demonstrate appropriate ethical behaviors using guidelines established by the APTA.
Define the roles of the PT, PTA physical therapy aide/technician, staff, and transporters.
Describe the roles of other members of the Rehab team (i.e. Physiatrist, Occupational Therapist (OT), Speech-Language Pathologist (SLP), Social Worker, Vocational Specialist, Recreation Therapist).
Explain how responsibilities are delegated to PTAs, aides, and clerical staff.
Describe the characteristics of an effective student-clinical instructor relationship.
Perform selected treatment under the supervision of a physical therapist.
Apply learned theories and techniques to direct patient.
Communicate verbally in language appropriate to patients and professional staff.
Create appropriate and accurate written notes and reports.
Examine a patients medical record, and be able to extract information pertinent to the PTA for treatment.
Identify issues related to insurance, reimbursement, supervision, and quality assurance.
Identify aspects of a patients social or psychological history, which may affect the outcome of his/her therapy.
Self assess clinical performance and professional behaviors.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Students will be assessed though a series of written assignments, clinical instructor evaluations, and self-assessment.

General Course Requirements and Recommendations
Students must pass this course with an "S" or better to remain in the PTA Program. In order to receive a passing grade of "S" for this course, students are expected to:

1. Meet with the ACCE after each externship.
2. Complete all of the assignments in a timely manner.
3. Completion of weekly logs for each affiliation.
4. Receive a rating of at least "Satisfactory" on all three of the clinical evaluation forms completed by the clinical instructor.

Grading Scale
Students will be assessed on the following scale: Satisfactory Unsatisfactory

Texts
Recommended: Rothstein, et al. "The Rehabilitation Specialist's Handbook." F.A.Davis. Current edition.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for PTA 291

PTA295 - Clinical Externship II

Overview

Subject
Physical Therapy Assistant

Academic Department
Health Careers

School
Health & Human Services

Course Description
A full-time supervised clinical practicum at affiliated physical therapy departments. Students participate in patient treatment under the delegation and supervision of a licensed physical therapist. Students integrate classroom knowledge and laboratory experience to achieve the competencies of an entry-level physical therapist assistant as outlined by the American Physical Therapy Association (APTA).

Course Pre-requisite(s)
PTA250 Extremity Orthopedics, PTA254 Spinal Orthopedics, PTA262 Rehab Neurological Cond 1, PTA265 Rehab Neuro Conditions Lab, and PTA291 Clinical Extern 1

Credit Hours
9

Total Contact Hours
Total Instructor Contact Hours:
560

Total Student Contact Hours:
560

Course Fee
85

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Professionalism: Ethical Practice
2. Professionalism: Legal Practice
3. Professionalism: Professional Growth
4. Interpersonal: Communication
5. Interpersonal: Inclusivity
6. Technical/Procedural: Clinical Reasoning
7. Technical/Procedural: Interventions: Therapeutic Exercise and Techniques
8. Technical/Procedural: Interventions: Mechanical and Electrotherapeutic Modalities
9. Technical/Procedural: Interventions: Functional Training and Application of Devices and Equipment
10. Business: Documentation
11. Business: Resource Management

Practices according to the Standards of Ethical Conduct; demonstrates respect for self, the patient/client, and colleagues in all situations.

Practices according to legal and professional standards, including all federal, state, and institutional regulations related to patient/client care and fiscal management.

Accepts and is receptive to feedback; participates in planning and/or self-assessment to improve clinical performance; contributes to the advancement of the clinical setting through educational opportunities; seeks out opportunities to improve knowledge and skills.

Demonstrates professional verbal and nonverbal communication with all stakeholders (e.g., patients/clients, caregivers, intra/interprofessional colleagues); adapts to diverse verbal and nonverbal communication styles during patient/client interactions; utilizes communication resources (e.g., interpreters) as appropriate; incorporates appropriate strategies to engage in challenging encounters with patients/clients and others; facilitates ongoing communication with physical therapist regarding patient/client care.

Delivers physical therapy services with consideration for patient/client diversity and inclusivity for all regardless of age, disability, ethnicity, gender identity, race, sexual orientation, or other characteristics of identity; Provides equitable patient/client care that does not vary in quality based on the patient's/client's personal characteristics (e.g., ethnicity, socioeconomic status).

Strategically gathers, interprets, and synthesizes information from multiple sources to make effective clinical judgments; applies current knowledge and clinical judgement while supporting the physical therapist with clinical activities; ensures patient/client safety during the episode of care; presents a logical rationale for clinical decisions with all stakeholders (e.g., patients/clients, caregivers, intra/interprofessional colleagues).

Performs selected therapeutic exercises, manual therapy techniques, airway clearance, and integumentary repair and protection techniques in a competent manner.

Applies selected mechanical and electrotherapeutic modalities in a competent manner.

Performs functional training in self-care and home management, including therapeutic activities; performs application and adjustment of devices and equipment in a competent manner.

Produces quality documentation that includes changes in the patient's/client's status, a description and progressions of specific interventions used, and communication among providers; maintains organization of patient/client documentation.

Participates in the efficient delivery of physical therapy services; demonstrates appropriate understanding of time management and appropriate use of clinical supplies and equipment when supporting physical therapy services.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
The Physical Therapist Assistant Clinical Performance Instrument 3.0 (CPI) will be used in the evaluation of student performance. It is expected that each student will receive a minimum of a mid-term and final evaluation for each clinical experience.

The grade for each rotation will be determined by the HFC instructor for PTA295 Clinical Externship II. It will be based on the completed CPI 3.0 and recommendations from the student's clinical instructor. To successfully complete the course, by the end of the first 7-week full time rotation, the student must be at advanced intermediate in the 11 performance criteria with no areas of significant concern. At the end of the second 7-week full time rotation, the student must be at entry-level performance in 11 area with no areas of significant concern.

General Course Requirements and Recommendations
The HFC instructor for PTA 295 will determine the student's grade. Students must pass this course with an "S" to remain in the PTA Program.
Grading Scale
Students will be assessed on the following scale-Satisfactory/Unsatisfactory

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for PTA 295

RAD109 - Clinical Education I

Overview

Subject
Radiographer Technologist

Academic Department
Health, Education, and Human Services

School
Health & Human Services

Course Description
This is an introductory, structured, competency based clinical course designed in concert with American Society of Radiologic Technologists (ASRT) curriculum and American Registry of Radiologic Technologist (ARRT) competencies. Course offers experiences in chart recognition, basic patient assessment, patient communication, and basic departmental procedures and policies. Equipment manipulation, chest, abdomen, and upper extremity radiographic positioning are emphasized.

Course Pre-requisite(s)
Acceptance into Radiographer AAS Degree Program

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
800

Total Student Contact Hours:
192

Course Fee
90

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Patient Chart Recognition
2. Basic Patient Assessment
3. Patient communication
4. Basic imaging department procedures and policies
5. Basic radiographic equipment manipulation
6. Chest, abdomen, and upper extremity positioning

Explain the basic administrative structure of the hospital system and radiology department.
Apply radiation protection principles, practices and procedures.
Prepare the room and patient for a radiographic exam.
Record the proper medical history as mandated by the clinical site.
Assure the patients safety during the exam.
Demonstrate the use of proper body mechanics when transferring patients.
Demonstrate the use of universal precautions in the clinical setting.
Align the x-ray tube and the image receptor accurately to capture the radiographic image.
Demonstrate correct manipulation of radiographic and fluoroscopic equipment.
Identify anatomy in the radiographs submitted for demonstration of competency.
Explain all pertinent rules regarding professionalism as mandated by the clinical site.
Maintain patient confidentiality.
Demonstrate Competency in at least four examinations including; equipment, chest (PA and lateral), abdomen, and upper extremity.
Complete Procedure Tests under the supervision of a Clinical Instructor to include decubitus chest, AP cort chest, upright abdomen, 1st digit, 3rd or 4th digit, and scaphoid.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
The final course grade will be calculated using a combination of tests, quizzes, assignments, presentations and participation.

General Course Requirements and Recommendations
Must obtain a grade of "C" or better to remain in the Radiographer AAS Degree program.

Grading Scale
The grading scale is:

- 93-100% = A
- 85-92% = B
- 80-84% = C
- 73-79% = D
- 0-72% = E

Texts
To be determined by program faculty.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for RAD 109

RAD111 - Principles of Radiation Protection

Overview

Subject
Radiographer Technologist

Academic Department
Health, Education, and Human Services

School
Health & Human Services

Course Description
This course provides the student with an overview of the principles of radiation protection including responsibilities of the radiographer to patients, personnel, and the public. The concepts of "As Low as Reasonably Achievable", stochastic and nonstochastic effects, and occupational effective dose limits are addressed. Regulatory agencies will be identified and their involvement in radiation protection will be discussed.

Course Pre-requisite(s)
Acceptance into Radiographer AAS Degree Program.

Credit Hours
2

Total Contact Hours
Total Instructor Contact Hours:
32

Total Student Contact Hours:
32

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. History of Radiography
2. Introduction to Radiation Protection
3. Interaction of X-radiation with Matter
4. Radiation Quantities and Units
5. Dose Limits for Exposure to Ionizing Radiation
6. Radiation Monitoring
7. Equipment Design for Radiation Protection
8. Management of Patient Radiation dose during Diagnostic X-ray Procedures
9. Management of Imaging Personnel Radiation Dose

Discuss the historical development of radiologic technology.
Explain ionizing radiation and its ability to damage tissue.
Discuss the different types of radiation.
Describe the types of radiation noting their origin and properties.
List the basic radiation quantities.
Describe the Standard International (SI) & systems of radiation units.
List the SI radiation units.
Explain the purpose and importance of personnel monitoring devices.
Identify several types of personnel monitoring devices.
Differentiate between radiation survey instruments and calibration instruments giving examples for each.
Explain the importance of radiation protection for both the patient & and the radiographer.
Explain equipment design for radiation protection.
Identify and describe equipment operation regulations involving patient and radiographer radiation protection.
Describe the concept of effective absorbed dose equivalent limits.
Identify and describe the federal and state regulatory agencies involved in establishing and enforcing radiation protection guidelines.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
The final course grade will be calculated using a combination of tests, quizzes, assignments, presentations and participation.
General Course Requirements and Recommendations
Must obtain a grade of "C" or better to remain in the Radiographer AAS Degree program.

Grading Scale
The grading scale is:

- 93-100% = A
- 85-92% = B
- 80-84% = C
- 73-79% = D
- 0-72% = E

Texts
Textbook(s) to be determined through program faculty approval.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for RAD 111

RAD114 - Introduction to Radiology & Patient Care

Overview

Subject
Radiographer Technologist

Academic Department
Health, Education, and Human Services

School
Health & Human Services

Course Description
This course is designed to introduce the basic concepts of patient care including patient interactions, body mechanics, patient transfer techniques, vital signs, infection control, emergency situations, age specific care, oxygen administration, basic pharmacology and venipuncture.

Course Pre-requisite(s)
Acceptance into Radiographer AAS Degree Program

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
55

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Communication with Patients
2. Professional Responsibilities of the Radiographer to Include the American Registry of Radiologic Technologists (ARRT) Code of Ethics and the American Society of Radiologic Technologist (ASRT) Practice Standards.
3. Medicolegal Issues in the Diagnostic Imaging Profession
4. Body Mechanics and Patient Transfer Techniques
5. Patient History and the Assessment of Vital Signs
6. Infection Control, Aseptic and Non-Aseptic Technique
7. Venipuncture
8. Pharmacology, Radiopharmaceuticals and Contrast Media
9. Medical Emergencies and Critical Thinking
10. Human Diversity
11. Patient Diversity
12. Hospital and Healthcare Institutions Administration and Careers.

Discuss the basic responsibilities of being a member of the healthcare and administrative teams and careers pathways.

Explain the importance of the ARRT Radiographer's Code of Ethics and the ASRT Practice Standards.

Discuss the professional relationships with other technologists, physicians, and hospital staff in an ethical manner.

Discuss medicolegal issues in the diagnostic imaging profession.

Discuss the psychological approach to patient care and steps to consider each patient as an individual and as a member of a diverse community.

Explain age specific care.

Describe the significance of patient rights and the responsibility of the radiographer in respecting these rights.

Describe and demonstrate proper body mechanics utilized during patient transfer.

Discuss the importance of maintaining all patient lines, catheters and equipment during patient transfer for portable radiography.

Explain the emotional and ethical responsibilities of a radiographer in dealing with terminally ill patients and their families.

Demonstrate the proper techniques in obtaining patient vital signs.

Define and describe the basic principles of asepsis.

Explain the concepts of infection control and Standard Precautions.

Demonstrate proper techniques in venipuncture.

Explain basic suction operation, oxygen administration, and care of O2 tanks.

Define and describe drug and contrast media classifications, methods of administration, dosages, contraindications and adverse reactions.

Define and describe radiopharmaceutical and the area of medical imaging where they are used.

Discuss the radiographers role in typical clinical emergency situations and critical thinking.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
The final course grade will be calculated using a combination of tests, quizzes, assignments, presentations and participation.

General Course Requirements and Recommendations
Must obtain a grade of "C" or better to remain in the Radiography program.

Grading Scale
The grading scale is:

- 93-100% = A
- 85-92% = B
- 80-84% = C
- 73-79% = D
- 0-72% = E

Texts
Textbook(s) to be determined through program faculty approval.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for RAD 114

RAD118 - Radiographic Positioning

Overview

Subject
Radiographer Technologist

Academic Department
Health, Education, and Human Services

School
Health & Human Services

Course Description
This lecture/laboratory course is one of a four course curriculum in radiographic positioning and procedures. This course introduces fundamental radiology positioning terminology and provides instruction in standard imaging procedures for chest, abdomen, and upper extremity. Positioning skills will be practiced and reinforced through laboratory assignments. Consideration is given to the evaluation of optimal diagnostic images.

Course Pre-requisite(s)
Acceptance into Radiographer AAS Degree Program

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
62

Total Student Contact Hours:
62

Course Fee
35

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Radiographic Positioning Terminology
2. Chest Positioning
3. Abdomen Positioning
4. Upper Extremity Positioning Including Digit Hand, Elbow, and Humerus
5. Bedside Portable Radiography

State standard radiographic positioning terminology.

Demonstrate the correct patient position, part placement, and central ray entrance landmarks for radiographic procedures of the chest, abdomen, and upper extremity.

Identify the structures demonstrated in chest, abdomen, and upper extremity radiographic images.

Evaluate these images for positioning, centering, appropriate anatomy and overall image quality.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
The final course grade will be calculated using a combination of tests, quizzes, assignments, presentations and participation.
General Course Requirements and Recommendations
Must obtain a grade of "C" or better to remain in the Radiographer AAS Degree program.

Grading Scale
The grading scale is:

- 93-100% = A
- 85-92% = B
- 80-84% = C
- 73-79% = D
- 0-72% = E

Texts
Textbook(s) to be determined through program faculty approval.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for RAD 118

RAD158 - Radiographic Positioning II

Overview

Subject
Radiographer Technologist

Academic Department
Health, Education, and Human Services

School
Health & Human Services

Course Description
This lecture/laboratory course is one of a four course curriculum in radiographic positioning and procedures. This course provides instruction in standard imaging procedures for shoulder girdle, lower extremity, and pelvic girdle. Positioning skills will be practiced and reinforced through laboratory assignments. Consideration is given to the evaluation of optimal diagnostic images.

Course Pre-requisite(s)
RAD161 Imaging Equipment, RAD109 Clinical Education I, RAD111 Prin Radiation Protecton, RAD114 Basic Patient Care Radiography and RAD118 Radiographic Positioning

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
62

Total Student Contact Hours:
62

Course Fee
70

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Foot, Toes, Ankle, and Calcaneus Anatomy and Positioning
2. Tibia and Fibula, Knee Anatomy and Positioning
3. Shoulder Girdle and Acromioclavicular (AC) Joints Anatomy and Positioning
4. Clavicle and Scapula Anatomy and Positioning
5. Femur, Hip and Pelvis Anatomy and Positioning

Demonstrate and describe the correct patient position, part placement, and central ray entrance landmarks for radiographic procedures of the shoulder girdle, lower extremity, and pelvic girdle.

Identify the structures demonstrated in shoulder girdle, lower extremity, and pelvic girdle radiographic images.

Evaluate these images for positioning, centering, appropriate anatomy and overall image quality.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
The final course grade will be calculated using a combination of tests, quizzes, assignments, presentations and participation.

General Course Requirements and Recommendations
Must obtain a grade of "C" or better to remain in the Radiographer AAS Degree program.

Grading Scale
The grading scale is:

- 93-100% = A
- 85-92% = B
- 80-84% = C
- 73-79% = D
- 0-72% = E

Texts
Textbook(s) to be determined through program faculty approval.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for RAD 158

RAD161 - Imaging Equipment

Overview

Subject
Radiographer Technologist

Academic Department
Health, Education, and Human Services

School
Health & Human Services

Course Description
This course focuses upon the equipment routinely utilized to produce diagnostic images. The major emphasis will be on the construction and operation of the diagnostic x-ray tube, digital imaging systems, and fluoroscopic imaging systems. Basic principles of advanced imaging equipment such as Computed Tomography (CT) and Magnetic Resonance Imaging (MRI) are introduced.

Course Pre-requisite(s)
RAD-101, RAD109 Clinical Education I, RAD111 Prin Radiation Protecton, RAD114 Basic Patient Care Radiography and RAD118 Radiographic Positioning

Credit Hours
1

Total Contact Hours
Total Instructor Contact Hours:
16

Total Student Contact Hours:
16

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics
1. Radiographic Equipment
2. X-ray Tube
3. Automatic Exposure Control Systems
4. Fluoroscopic Equipment
5. Image Intensification Tube
6. Flat Panel Fluoroscopy
7. Tomography and Computed Tomography
8. Magnetic Resonance Imaging
9. Digital and Computed Radiography
10. Bedside Portable Radiography

Describe the components and function of a diagnostic x-ray tube.

Describe the components and function of automatic exposure control (AEC) devices.

Explain line-focus principle.

Describe the components and function of an image intensifier tube.

Describe several advantages of computed radiography over screen-film radiography.

Define direct digital radiography and indirect digital radiography.

Discuss basic computed tomography (CT) equipment components and functions.

Discuss basic magnetic resonance imaging component and functions.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
The final course grade will be calculated using a combination of tests, quizzes, assignments, presentations and participation.
General Course Requirements and Recommendations
Must obtain a grade of "C" or better to remain in the Radiographer AAS Degree program.

Grading Scale
The grading scale is:

- 93-100% = A
- 85-92% = B
- 80-84% = C
- 73-79% = D
- 0-72% = E

Texts
Textbook(s) to be determined through program faculty approval.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for RAD 161

RAD171 - Principles of Exposure

Overview

Subject
Radiographer Technologist

Academic Department
Health, Education, and Human Services

School
Health & Human Services

Course Description
This lecture/lab course focuses upon the factors that govern and influence the production of quality radiographic images. The course details the main properties of radiographic density/brightness, contrast, recorded detail/spatial resolution and distortion. Exposure calculations will be introduced.

Course Pre-requisite(s)
RAD-101, RAD109 Clinical Education I, RAD111 Prin Radiation Protecton, RAD114 Basic Patient Care Radiography and RAD118 Radiographic Positioning

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics
1. Math Review
2. Radiographic Image Formation
3. Radiographic Image Quality: Photographic Properties
4. Scatter Control
5. Radiographic Image Quality: Geometric Properties
6. Introduction to Digital Imaging
7. Digital Image Receptors
8. Exposure Factor Selection
9. Automatic Exposure Control
10. Repeat Radiograph Analysis
11. Total Exposure - mAs, kVp Lab Activity
12. Grid Use and Scatter Control Lab Activity
13. Detail/Distortion Lab Activity
14. Automatic Exposure Control Lab Activity

Discuss elements of a radiographic image.

Apply a problem solving process to image analysis.

Describe an effective image analysis method.

Describe the role of the radiographer in image analysis.

Apply the process for evaluating images for adequate density/ brightness, contrast, recorded detail/spatial resolution, and acceptable limits of distortion.

Explain how the radiographer determines that an adequate level of penetration has been applied to produce an acceptable image.

Analyze the images to determine the appropriate use of beam restriction.

Differentiate between technical factor problems, procedural factor problems, and equipment malfunctions.

Critique images for appropriate technical and procedural factors and employ corrective actions if necessary.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
The final course grade will be calculated using a combination of tests, quizzes, assignments, presentations and participation.

General Course Requirements and Recommendations
Must obtain a grade of "C" or better to remain in the Radiographer AAS Degree program.

Grading Scale
The grading scale is:

- 93-100% = A
- 85-92% = B
- 80-84% = C
- 73-79% = D
- 0-72% = E

Texts
Textbook(s) to be determined through program faculty approval.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for RAD 171

RAD181 - Fluoroscopy Studies

Overview

Subject
Radiographer Technologist

Academic Department
Health, Education, and Human Services

School
Health & Human Services

Course Description
This course is one in a series of four courses in radiographic positioning and procedures. The course provides instruction in standard imaging procedures for contrast studies of the digestive and the genitourinary tracts. Consideration is given to special radiographic contrast studies. Consideration is also given to the evaluation of optimal diagnostic images.

Course Pre-requisite(s)
RAD-101, RAD109 Clinical Education I, RAD111 Prin Radiation Protecton, RAD114 Basic Patient Care Radiography and RAD118 Radiographic Positioning

Credit Hours
1

Total Contact Hours
Total Instructor Contact Hours:
16

Total Student Contact Hours:
16

Course Fee
35

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Contrast Media: Classifications, Methods of Administration, Dosage, Contraindications and Adverse Reactions
2. Equipment and Technical Considerations
3. Radiographic Contrast Studies of the Digestive Tract: Esophagus, Stomach, Small Bowel – routine and air contrast, Large Bowel - routine and air contrast
4. Radiographic Contrast Studies of the Genitourinary Tract: Intravenous Pyelogram, Nephrotomography, and Voiding Cystourethrogram
5. Special Studies: Endoscopic Retrograde Cholangiopancreatography, Hysterosalpingogram, Arthrography, Myelogram, and Venogram

Explain the purpose of contrast media.

Name the type, dosage, and route of administration commonly used to perform radiographic contrast and special studies.

Explain the patient preparation for various contrast and special studies.

Demonstrate and describe the correct patient position, part placement, and central ray landmarks for radiographic contrast studies of the following anatomic systems, gastrointestinal and genitourinary.

Describe the correct patient position, part placement, and central ray landmarks for special radiographic contrast studies of the biliary tract, the pancreatic duct, the spinal column, fallopian tubes, joints and veins.

Identify in radiographic images the evaluation criteria for each contrast study image.

Evaluate images for positioning, centering, appropriate anatomy and overall image quality.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
The final course grade will be calculated using a combination of tests, quizzes, assignments, presentations and participation.
General Course Requirements and Recommendations
Must obtain a grade of "C" or better to remain in the Radiographer AAS Degree program.

Grading Scale
The grading scale is:

- 93-100% = A
- 85-92% = B
- 80-84% = C
- 73-79% = D
- 0-72% = E

Texts
Textbook(s) to be determined through program faculty approval.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for RAD 181

RAD190 - Clinical Education II

Overview

Subject
Radiographer Technologist

Academic Department
Health, Education, and Human Services

School
Health & Human Services

Course Description
This is second in a sequence of structured, competency based clinical courses in concert with American Society of Radiologic Technologist (ASRT) curriculum and ASRT competencies. Course offers experiences in chart recognition, basic patient assessment, patient communication, and basic departmental procedures and policies. Equipment manipulation, chest, abdomen, upper extremity, lower extremity and shoulder girdle radiographic positioning are emphasized.

Course Pre-requisite(s)
RAD-101, RAD109 Clinical Education I, RAD111 Prin Radiation Protecton, RAD114 Basic Patient Care Radiography and RAD118 Radiographic Positioning

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
800

Total Student Contact Hours:
360

Course Fee
70

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Introductory Mobile Imaging to include Equipment Manipulation and Positioning
2. Basic Patient Care and Interactions
3. Basic Radiographic Equipment Manipulation
4. Chest, Abdomen, Upper Extremity, Lower Extremity, and Shoulder Girdle Positioning

Explain the basic administrative structure of the hospital system and radiology department.

Apply radiation protection principles, practices and procedures.

Prepare the room and patient for a radiographic exam.

Obtain and record the proper medical history as mandated by the clinical site.

Assure the patients safety during the exam.

Utilize proper body mechanics when transferring patients.

Apply universal precautions in the clinical setting.

Align the x-ray tube and the image receptor accurately to capture the radiographic image.

Demonstrate correct manipulation of radiographic, fluoroscopic and mobile equipment.

Identify anatomy in the radiographs submitted for demonstration of competency.

Adopt all pertinent rules regarding professionalism as mandated by the clinical site.

Maintain patient confidentiality.

Maintain competency in previously mastered examinations.

Demonstrate Competency in at least seven (7) examinations which may include: lower extremity, hip, pelvis, clavicle, scapula, shoulder, Acromioclavicular (AC) joints, and contrast studies - gastrointestinal, genitourinary or other.

Complete Procedure tests under the supervision of a Clinical Instructor to include: elbow, humerus, calcaneus, tibia/fibula, knee - AP portable and cross-table lateral, scapula, shoulder routine, shoulder scapular Y and shoulder inferosuperior axial.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
The final course grade will be calculated using a combination of tests, quizzes, assignments, presentations and participation.
General Course Requirements and Recommendations
Must obtain a grade of "C" or better to remain in the Radiographer AAS Degree program.

Grading Scale
The grading scale is:

- 93-100% = A
- 85-92% = B
- 80-84% = C
- 73-79% = D
- 0-72% = E

Texts
Textbook(s) to be determined through program faculty approval.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for RAD 190

RAD196 - Clinical Education Level 3

Overview

Subject
Radiographer Technologist

Academic Department
Health, Education, and Human Services

School
Health & Human Services

Course Description
The third course in a sequence of structured, competency based, clinical courses offering experiences in chart recognition, patient assessment, patient communication, equipment manipulation, and chest, abdomen, lower extremity, upper extremity, shoulder, and pelvis radiographic positioning.

Course Pre-requisite(s)
BIO234 Anatomy and Physiology II, RAD158 Radiographic Positioning II, RAD161 Imaging Equipment, RAD171 Principles of Exposure, RAD181 Fluoroscopy Studies, RAD190 Clinical Education II

Credit Hours
4

Total Contact Hours
Total Instructor Contact Hours:
600

Total Student Contact Hours:
288

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. In concert with American Society of Radiologic Technologists (ASRT) Curriculum and American Registry of Radiologic Technologists (ARRT) competencies: Continued development of radiographic and mobile equipment skills.
2. Continued performance of mastered clinical competencies.
3. Introductory trauma radiography.
4. Shoulder girdle and pelvic girdle positioning.

Assess and apply radiation protection principles, practices, and procedures.
Properly prepare the x-ray room and patient for a radiographic exam.
Collect and record the proper medical history as mandated by the clinical site.
Assure the patients safety during the exam.
Demonstrate the use of proper body mechanics when transferring patients.
Demonstrate the use of universal precautions in the clinical setting.
Demonstrate accurate alignment of the x-ray tube and the image receptor to capture the radiographic image.
Differentiate anatomy in the radiographs submitted for demonstration of competency.
Demonstrate all pertinent rules regarding professionalism as mandated by the clinical site.
Adopt patient confidentiality standards.
Demonstrate the maintenance of competency in previously mastered examinations.
Complete Competency Tests in at least fourteen (14) examinations which may include the following: chest, abdomen, upper extremities, lower extremities, shoulder girdle, portable hip, and trauma hip.
Complete the following Procedure Tests under the supervision of a Clinical Instructor: femur and hip, anteroposterior (AP) portable hip, and trauma axiolateral cross table hip.
During two weeks of afternoon clinical rotations: modify radiographic examinations for trauma patients and conduct trauma radiographic examinations under direct supervision.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment is based on student performance during Competency and Procedures Examinations, week clinical staff evaluations, and student attendance.

General Course Requirements and Recommendations
Must obtain a grade of "C" or better to remain in the Radiographer AAS Degree program.

Grading Scale
The grading scale is:

- 93-100% = A
- 85-92% = B
- 80-84% = C

- 73-79% = D
- 0-72% = E

Texts
Textbook(s) to be determined through program faculty approval.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for RAD 196

RAD209 - Intermediate Clinical Education

Overview

Subject
Radiographer Technologist

Academic Department
Health, Education, and Human Services

School
Health & Human Services

Course Description
This is fourth in a sequence of structured, competency based clinical courses in concert with American Society of Radiologic Technologist (ASRT) curriculum and American Registry of Radiologic Technologist (ARRT) competencies. Course emphasizes increasing technical proficiency in all previously covered radiographic procedures and introduces vertebral column, skull, facial bones, nasal bones, and sinuses. Experience in pediatric radiography is offered.

Course Pre-requisite(s)
RAD196 Clinical Education Level 3, RAD284 Principles Computed Tomography

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
800

Total Student Contact Hours:
360

Course Fee
90

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Intermediate Radiographic and Mobile Equipment Manipulation
2. Introductory Pediatric Radiography
3. Introductory Vertebral Column and Bony Thorax Radiography
4. Introductory Skull, Sinus, and Facial Bone Radiography

Apply radiation protection principles, practices and procedures.
Prepare the room and patient for a radiographic exam.
Obtain and record the proper medical history as mandated by the clinical site.
Assure the patients safety during the exam.
Utilize proper body mechanics when transferring patients.
Apply universal precautions in the clinical setting.
Align the x-ray tube and the image receptor accurately to capture the radiographic image.
Identify anatomy in the radiographs submitted for demonstration of competency.
Adopt pertinent rules regarding professionalism as mandated by the clinical site.
Maintain patient confidentiality.
Maintain competency in previously mastered examinations.
Analyze, organize and perform examinations on pediatric patients to include use of adequate shielding and immobilization.
Modify radiographic examinations for pediatric patients. 1.Complete Competency Tests in at least sixteen (16) examinations which may include: cervical spine, thoracic spine, lumbar spine, sacrum/coccyx, sacroiliac joints, ribs, sternum, sternoclavicular joints, portable hip, trauma hip, contrast studies, surgical radiographic studies to include C-arm and retrograde cystograms, and pediatric studies.
Complete Procedure Tests under the supervision of a Clinical Instructor to include thoracic spine, cervical spine, sacrum/coccyx, skull, and facial bones.
Apply previously mastered clinical skills to non-routine patients.
Perform multiple radiographic examinations on a single patient.
Conduct advanced radiographic image analysis.
Produce quality radiographic images with intermediate technical proficiency.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of academic achievement will include a combination of tests, quizzes, assignments, presentations and participation.

General Course Requirements and Recommendations
Must obtain a grade of "C" or better to remain in the Radiographer AAS Degree program.

Grading Scale
The grading scale is:

- 93-100% = A
- 85-92% = B
- 80-84% = C
- 73-79% = D
- 0-72% = E

Texts
Textbook(s) to be determined through program faculty approval.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for RAD 209

RAD214 - Pathology and Cross Sectional Anatomy

Overview

Subject
Radiographer Technologist

Academic Department
Health, Education, and Human Services

School
Health & Human Services

Course Description
This course is designed to introduce concepts related to disease and etiological considerations with emphasis on radiographic appearance of disease and impact on exposure factor selection. The course is designed to establish a knowledge base in basic cross sectional anatomy of head, neck, thorax, and abdomen.

Course Pre-requisite(s)
RAD196 Clinical Education Level 3, RAD284 Principles Computed Tomography

Credit Hours
2

Total Contact Hours
Total Instructor Contact Hours:
32

Total Student Contact Hours:
32

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Introduction to Pathology Principles
2. Trauma and Physical Injury
3. Skeletal System Pathology
4. Respiratory System Pathology
5. Cross Sectional Anatomy of the Thorax
6. Respiratory System Pathology
7. Gastrointestinal and Hepatobiliary System Pathology
8. Cross Sectional Anatomy of the Abdomen
9. Reproductive System Pathology
10. Reproductive and Urinary Systems Pathology
11. Circulatory System Pathology
12. Lymph and Endocrine Systems Pathology
13. Nervous System Pathology
14. Cross Sectional Anatomy of the Head and Neck
15. Contrast Media

Define basic terms related to pathology.
Describe the basic manifestations of pathological conditions and their relevance to radiologic procedures.
Discuss the classifications of trauma.
Describe imaging procedures used in diagnosing disease.
List the causes of tissue disruption.
Describe the healing process.
Identify the complications connected with the repair and replacement of tissue.
Describe the various systemic classifications of disease in terms of etiology, types, common sites, complications, and prognosis.
Describe the radiographic appearance of diseases.
Identify imaging procedures and interventional techniques appropriate for diseases common to each body system.
Identify diseases caused by or contributed to by genetic factors.
Describe radiographic procedures and exposure factor selection appropriate for different types of disease.
Identify major anatomical structures found within cross sectional images of the head, neck, thorax, and abdomen.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of academic achievement will include tests, quizzes, assignments, and presentations.

General Course Requirements and Recommendations
Must obtain a grade of "C" or better to remain in the Radiographer AAS Degree program.

Grading Scale
Student grades will be assigned using the following scale:

- 93-100% = A
- 85-92% = B
- 80-84% = C
- 73-79% = D
- 0-72% = E

Texts
Textbook(s) to be determined through program faculty approval.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for RAD 214

RAD228 - Radiographic Procedures

Overview

Subject
Radiographer Technologist

Academic Department
Health, Education, and Human Services

School
Health & Human Services

Course Description
This lecture/laboratory course is one of a four course curriculum in radiographic positioning and procedures. Course provides instruction in standard imaging procedures for the vertebral column, bony thorax, skull, facial bones, and sinuses. Positioning skills will be practiced and reinforced through laboratory assignments. Consideration is given to the evaluation of optimal diagnostic images.

Course Pre-requisite(s)
RAD196 Clinical Education Level 3, RAD284 Principles Computed Tomography

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
62

Total Student Contact Hours:
62

Course Fee
35

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Vertebral column anatomy and disorders
2. Lumbar, thoracic, and cervical spine anatomy and positioning
3. Sacrum, coccyx, and sacroiliac joint anatomy and positioning
4. Bony thorax anatomy and positioning
5. Special spine studies
6. Cranium: Anatomy, positioning landmarks and lines
7. Skull positioning
8. Facial bones anatomy and positioning
9. Paranasal anatomy and positioning

Identify and describe the localization points and baselines utilized in positioning of the vertebral column, bony thorax, skull, facial bones, and paranasal sinuses.

Demonstrate and describe the correct patient position, part placement, and central ray entrance landmarks for the following radiographic procedures: vertebral column, bony thorax, skull, orbits, facial bones, nasal bones, zygomatic arches, mandible, and paranasal sinuses.

Cite the structures demonstrated in these radiographic images.

Evaluate these images for correct positioning, accurate centering, demonstration of appropriate anatomy, and overall image quality.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of academic achievement will include a combination of tests, quizzes, assignments, presentations and participation.
General Course Requirements and Recommendations
Must obtain a grade of "C" or better to remain in the Radiography program.
Grading Scale
The grading scale is:

- 93-100% = A
- 85-92% = B
- 80-84% = C
- 73-79% = D
- 0-72% = E

Texts
Textbook(s) to be determined through program faculty approval.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for RAD 228

RAD267 - Radiation Physics

Overview

Subject
Radiographer Technologist

Academic Department
Health, Education, and Human Services

School
Health & Human Services

Course Description
This lecture course focuses upon fundamental physics for radiologic technology including electrostatics, electrodynamics, electromagnetic induction, fundamentals of x-ray generating equipment, x-ray production, and beam characteristics. X-ray photon interactions with matter will be reviewed.

Course Pre-requisite(s)
RAD196 Clinical Education Level 3, RAD284 Principles Computed Tomography

Credit Hours
4

Total Contact Hours
Total Instructor Contact Hours:
62

Total Student Contact Hours:
62

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Fundamental Principles of Physics
2. Math Review
3. Atomic Structure and Matter
4. Electromagnetic Energy
5. Electrodynamics
6. Electromagnetism
7. Generators, Motors and Transformers
8. Rectification
9. X-ray Tube and Circuits
10. X-ray Production, Emission, and Spectra
11. X-ray Emission Properties
12. X-ray Interactions with Matter
13. X-ray Properties

List the fundamental units of measurement.

Describe the difference between fundamental and derived units of measurement.

Calculate measurements of velocity, momentum, force, work, and power when given the appropriate information.

Describe fundamental atomic structure.

Describe electron shells and electron binding energy.

Describe the process of ionization of an atom.

Describe the electromagnetic spectrum.

Differentiate between non-ionizing and ionizing electromagnetic radiation.

Describe the common properties of all electromagnetic energy.

Solve problems using wave equation calculations.

Solve problems using inverse square law calculations.

Define potential difference, current and resistance.

Solve problems using Ohms Law calculations.

Describe the principles of magnetism and electromagnetism.

Identify the general components and functions of the x-ray tube and filament circuits.

Explain the role of rectification in the x-ray tube circuit.

Describe the conditions necessary to produce x-radiation.

Compare the production of bremsstrahlung and characteristic radiations.

Describe and discuss the properties of x-rays. Describe the x-ray emission spectra.

Identify the factors that affect the x-ray emission spectra.

Discuss various x-ray photon interactions with matter including energy range, site of interaction in the atom, the effect on the atom, and the effect on the x-ray photon.

Describe and diagram the various interactions of x-rays and matter.

Discuss the clinical significance of photoelectric effect and modified scattering in diagnostic imaging.

Explain the impact of technical factor changes upon the x-ray beam characteristics.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of academic achievement will include a combination of tests, quizzes, assignments, presentations and participation.

General Course Requirements and Recommendations
Must obtain a grade of "C" or better to remain in the Radiographer AAS Degree program.

Grading Scale
The grading scale is:

- 93-100% = A
- 85-92% = B
- 80-84% = C
- 73-79% = D
- 0-72% = E

Texts
Textbook(s) to be determined through program faculty approval.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for RAD 267

RAD271 - Digital Image Acquisition and Management

Overview

Subject
Radiographer Technologist

Academic Department
Health, Education, and Human Services

School
Health & Human Services

Course Description
This course addresses all technical aspects of digital image acquisition, manipulation, and storage. Course includes digital imaging characteristics, types of imaging systems and system components, digital image acquisition and manipulation, and digital image archiving systems. Also included are principles of imaging system quality assurance and maintenance.

Course Pre-requisite(s)
RAD214 Pathology & Cross Sect Anatomy, RAD228 Radiographic Procedures, RAD267 Radiation Physics, and RAD209 Intermediate Clinical Educatio

Credit Hours

2

Total Contact Hours

Total Instructor Contact Hours:
32

Total Student Contact Hours:
32

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Digital image characteristics
    - Define terminology associated with digital imaging.
2. Computed radiography (CR) equipment and image acquisition
    - Describe CR imaging systems, to include the PSP plate and reader components.
    - Recognize and correct image acquisition errors with each system type.
3. Digital radiography (DR) equipment and image acquisition, to include direct and indirect conversion systems
    - Describe DR imaging systems, to include direct and indirect conversion systems.
    - Recognize and correct image acquisition errors with each system type.
    - Compare the advantages and limitations of each system type.
4. Digital image processing and manipulation
    - Describe how digital images are processed and the various types of manipulates that may be applied to an image.
    - Demonstrate various image manipulations.
    - Compare the advantages and limitations of each system type.
5. As Low As Reasonably Achievable (ALARA) principles as related to digital imaging
    - Examine the potential impact on patient exposure and methods of practicing the ALARA principle with digital imaging.
    - Relate exposure indicator values to technical factor selection, part/beam/receptor alignment, and patient exposure with digital imaging.
6. Fundamentals of imaging informatics
    - Describe the role of imaging informatics in the Healthcare industry, to include various information and networking systems.
    - Describe the **Health Insurance Portability and Accountability Act** (HIPAA) as it relates to electronic information.
7. Quality management principles for digital imaging and imaging informatics systems
    - Discuss quality management for digital imaging systems, informatics systems, and ancillary equipment.

Define terminology associated with digital imaging.

Describe CR imaging systems, to include the PSP plate and reader components.

Recognize and correct image acquisition errors with each system type.

Describe DR imaging systems, to include direct and indirect conversion systems.

Compare the advantages and limitations of each system type.

Describe how digital images are processed and the various types of manipulates that may be applied to an image.

Demonstrate various image manipulations.

Examine the potential impact on patient exposure and methods of practicing the ALARA principle with digital imaging.

Relate exposure indicator values to technical factor selection, part/beam/receptor alignment, and patient exposure with digital imaging.

Describe the role of imaging informatics in the Healthcare industry, to include various information and networking systems.

Describe the Health Insurance Portability and Accountability Act (HIPAA) as it relates to electronic information.

Discuss quality management for digital imaging systems, informatics systems, and ancillary equipment.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
The final course grade will be calculated using a combination of tests, quizzes, assignments, presentations and participation.
General Course Requirements and Recommendations
Students must receive a grade of "C" or better to remain in the Radiographer AAS Degree program.

Grading Scale
The grading scale is:

- 93-100% = A
- 85-92% = B
- 80-84% = C
- 73-79% = D
- 0-72% = E

Texts
Textbook(s) to be determined through program faculty approval.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for RAD 271

RAD274 - Principles of Radiation Biology

Overview

Subject
Radiographer Technologist

Academic Department
Health, Education, and Human Services

School
Health & Human Services

Course Description
This lecture course provides an overview of the principles of the interaction of radiation with living systems. Radiation effects on molecules, cells, tissues, and the body as a whole are presented. Factors affecting biological response to radiation exposure are presented, including acute and chronic effects.

Course Pre-requisite(s)
RAD214 Pathology & Cross Sect Anatomy, RAD228 Radiographic Procedures, RAD267 Radiation Physics, and RAD209 Intermediate Clinical Educatio

Credit Hours
2

Total Contact Hours
Total Instructor Contact Hours:
32

Total Student Contact Hours:
32

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Human Biology
2. Chemical Composition of the Cell
3. Cell Structures
4. Cell Reproduction
5. Law of Bergonie and Tribondeau
6. Physical and Biological Factors that Affect Radiosensitivity
7. Radiation Dose - Response Relationships
8. Molecular and Cellular Radiobiology
9. Early Effects of Radiation
10. Acute Radiation Syndromes
11. Late Effects of Radiation
12. Embryo and Fetal Effects of Radiation

Describe the structures and functions of the human cell.
Differentiate between somatic and germ cells.
Describe the process of cell division for both somatic and germ cells.
Describe the principles of target theory.
Distinguish between direct and indirect effect of radiation on cells.
Describe the physical factors that affect radiation response.
Describe the biological factors affect radiation response.
Evaluate the radiosensitivity of tissue and organs.
Describe the purpose and construction of dose-response relationship curves.
Identify the different types of dose-response relationship curves.
Describe the stages of acute radiation syndrome and the radiation dose ranges associated with each specific syndrome.
Describe local tissue effects following exposure to high doses of radiation and the dose ranges associated with each specific effect.
Explain the long-term effects associated with excessive radiation exposure.
Discuss the correlation between radiation exposure and malignancy.
Discuss embryo and fetal effects of radiation exposure.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of academic achievement will include a combination of tests, quizzes, assignments, presentations and participation.
General Course Requirements and Recommendations
Students must receive a grade of "C" or better to remain in the Radiographer AAS Degree program.

Grading Scale
The grading scale is:

- 93-100% = A
- 85-92% = B
- 80-84% = C
- 73-79% = D
- 0-72% = E

Texts
Textbook(s) to be determined through program faculty approval.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for RAD 274

RAD284 - Principles of Computed Tomography

Overview

Subject
Radiographer Technologist

Academic Department
Health, Education, and Human Services

School
Health & Human Services

Course Description
This online course provides entry level radiography students with principles related to computed tomography (CT) imaging.

Course Pre-requisite(s)
RAD158 Radiographic Positioning II, RAD161 Imaging Equipment, RAD171 Principles of Exposure, RAD181 Fluoroscopy Studies, and RAD190 Clinical Education II

Credit Hours
1

Total Contact Hours
Total Instructor Contact Hours:
16

Total Student Contact Hours:
16

Course Fee
10

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Historical Development,
2. Scanner Generations
3. Conventional and Helical Scanning
4. Components of the CT Imaging System
5. Display Console
6. Application of CT terminology
7. Image Reconstruction: Image Matrix, CT numbers, and Artifacts
8. Factors Affectng Image Quality
9. Data Storage Techniques
10. Radiation Protection
11. Diagnostic Applications
12. Contrast Media

Describe the components of the CT imaging system.
Differentiate between conventional and spiral/helical CT scanning.
Explain the function of collimators on CT.
List the computer data processing steps.
Name the functions of the array processor used for image reconstruction.
Define the term algorithm and explain its impact on image scan factors and reconstruction.
Define the terms raw data and image data.
Explain the difference between reconstructing and reformatting an image.
Describe the application of the following terms to CT: pixel, matrix, voxel, linear attenuation coefficient, CT/Hounsfield number, partial volume averaging, window width (ww) and window level (wl), spatial resolution, contrast resolution, noise, annotation, region of interest (ROI), and standard vs. volumetric data acquisition.
Name the common controls found on CT operator consoles and describe how and why each is used.
Analyze CT images for appearance of artifacts.
Explain how artifacts can be reduced or eliminated.
List and describe current data storage techniques used in CT.
Name the radiation protection devices that can be used to reduce patient dose in CT and describe the correct application of both.
Identify the types and applications of contrast media used in CT.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of academic achievement will include a combination of tests, quizzes, assignments, presentations and participation.
General Course Requirements and Recommendations
Students must receive a grade of "C" or better to remain in the Radiographer AAS Degree program.

Grading Scale
The grading scale is:

- 93-100% = A
- 85-92% = B
- 80-84% = C
- 73-79% = D
- 0-72% = E

Texts
Textbook(s) to be determined through program faculty approval.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for RAD 284

RAD286 - Registry Review

Overview

Subject
Radiographer Technologist

Academic Department
Health, Education, and Human Services

School
Health & Human Services

Course Description
Provides a comprehensive review designed to prepare radiologic technology students for the American Registry of Radiologic Technologists (ARRT) certification examination. An orderly review based on the ARRT radiography content specifications is presented. Test preparation and test-taking strategies are also discussed.

Course Pre-requisite(s)
RAD271 Digital Image Acquisition Mgt., RAD274 Principles Radiation Biology, and RAD290 Advanced Clinical Education

Credit Hours
2

Total Contact Hours
Total Instructor Contact Hours:
32

Total Student Contact Hours:
32

Course Fee
80

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. ARRT Certification & Application Handbook
2. Test Taking Skills and Strategies
3. Introduction to Corectec Radiography Review Course
4. Patient Care: Patient Interactions and Management
5. Safety: Radiation Physics and Radiology
6. Image Production: Image Acquisition and Technical Evaluation, Equipment Operation and Quality
7. Procedures: Head, Spine and Pelvis; Thorax and Abdomen; Extremeities
8. Timed Mock Registry Examination
9. Exit Survey

Complete a thorough review of the following: patient care, safety, image production, and procedures.
State the content specifications of the ARRT Certification examination.
Explain the testing format used by the ARRT.
Discuss the importance of the ARRT exam and professional certification.
Discuss basic test preparation and test taking strategies.
Pass a timed mock registry exam with a score of 80%.
Assess student ARRT content category strengths and weaknesses in preparation for the ARRT exam.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of academic achievement will include a combination of tests, quizzes, assignments, presentations and participation.
General Course Requirements and Recommendations
Students must pass the exit exam given in this course with an 80% before they will be allowed to graduate from the Radiographer AAS Degree program.

Grading Scale
The grading scale is:

- 93-100% = A
- 85-92% = B
- 80-84% = C
- 73-79% = D
- 0-72% = E

Texts
All technical radiography texts used throughout the program. Corectec Radiography Review Course.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for RAD 286

RAD290 - Advanced Clinical Education

Overview

Subject
Radiographer Technologist

Academic Department
Health, Education, and Human Services

School
Health & Human Services

Course Description
This is fifth in a sequence of structured, competency based clinical courses in concert with American Society of Radiologic Technologist (ASRT) curriculum and American Registry of Radiologic Technologists (ARRT) competencies. Course emphasizes headword including skull, facial bones, paranasal sinuses, and increasing technical proficiency in all previously covered radiographic procedures. Students will continue to develop trauma radiography skills and advanced mobile radiography skills.

Course Pre-requisite(s)
RAD209 Intermediate Clinical Educatio, RAD214 Pathology & Cross Sect Anatomy, RAD228 Radiographic Procedures, RAD267 Radiation Physics

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
800

Total Student Contact Hours:
240

Course Fee
70

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Advanced Radiographic and Mobile Equipment
2. Advanced Trauma Radiography
3. Intermediate Pediatric Radiography
4. Advanced Skull, Sinus, and Facial Bone Radiography
5. Clinical management of Routine, Non-routine, Pediatric, Geriatric, and Trauma patients in the Imaging Department.

Apply radiation protection principles, practices and procedures.

Prepare the room and patient for a radiographic exam.

Obtain and record the proper medical history as mandated by the clinical site.

Assure the patients safety during the exam.

Utilize proper body mechanics when transferring patients.

Apply universal precautions in the clinical setting.

Align the x-ray tube and the image receptor accurately to capture the radiographic image.

Identify anatomy in the radiographs submitted for demonstration of competency.

Adopt pertinent rules regarding professionalism as mandated by the clinical site.

Maintain patient confidentiality.

Maintain competency in previously mastered examinations.

Complete Competency Tests on at least fifteen (15) examinations.

Complete Procedure Tests under the supervision of a Clinical Instructor to include mandible and sinuses.

Apply previously mastered clinical skills to non-routine patients.

Analyze, organize, and efficiently perform multiple radiographic examinations on a single patient.

Modify radiographic examinations for trauma patients.

Conduct trauma radiographic examinations with confidence and ease under indirect supervision.

Produce quality radiographic images with appropriate program exit level clinical competency.

Demonstrate clinical competency by completing a minimum of five (5) exit practical competency rechecks from the following categories: chest, abdomen, upper extremity, lower extremity, vertebral column, cranium, contrast examination, portable examination, and cystourethrography examination.

Demonstrate program exit level competency by successfully completing exit practical and written scenario tests.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of academic achievement will include a combination of tests, quizzes, assignments, presentations and participation.
General Course Requirements and Recommendations
Students must receive a grade of "C" or better to remain in the Radiographer AAS Degree program.

Grading Scale
The grading scale is:

- 93-100% = A
- 85-92% = B
- 80-84% = C
- 73-79% = D
- 0-72% = E

Texts
Textbook(s) to be determined through program faculty approval.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for RAD 290

RAD296 - Capstone Clinical Education

Overview

Subject
Radiographer Technologist

Academic Department
Health, Education, and Human Services

School
Health & Human Services

Course Description
This is sixth in a sequence of structured, competency based clinical courses emphasizing final mastery of all aspects of professional, entry level radiologic technology. Structured clinical experiences are offered in selected specialty rotations which may include Ultrasound, Computed Tomography, Magnetic Resonance Imaging, Radiation Therapy, Mammography, and Positron Emission Tomography.

Course Pre-requisite(s)
RAD271 Digital Image Acquisition Mgt., RAD274 Principles Radiation Biology, RAD290 Advanced Clinical Education

Credit Hours
1.5

Total Contact Hours
Total Instructor Contact Hours:
400

Total Student Contact Hours:
168

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Advanced Radiographic and Mobile Equipment Manipulation
2. Advanced Radiographic Procedures
3. Clinical Management of Routine, Non-routine, Pediatric, Geriatric, and Trauma Patients in the Imaging Department

Apply radiation protection principles, practices, and procedures.
Prepare the room and patient for a radiographic exam.
Record the proper medical history as mandated by the clinical site.
Assure the patients safety during the exam.
Use proper body mechanics when transferring patients.
Use universal precautions in the clinical setting.
Align the x-ray tube and the image receptor accurately to capture the radiographic image.
Identify anatomy in the radiographs submitted for demonstration of competency.
Adopt pertinent rules regarding professionalism as mandated by the clinical site.
Maintain patient confidentiality.
Demonstrate continued competency in previously mastered examinations.
Explain the basic principles of the specialty imaging rotation chosen by student.
Demonstrate Competency in at least eight (8) examinations.
Apply previously mastered clinical skills to non-routine patients.
Analyze, organize, and perform efficient multiple radiographic examinations on a single patient.
Produce quality radiographic images with appropriate program exit level clinical competency.
Demonstrate clinical competency by completing a minimum of five (5) exit practical competency rechecks from the following nine categories: chest, abdomen, upper extremity, lower extremity, vertebral column, cranial examination, contrast examination, portable examination, and cysto examination.
Demonstrate program exit level clinical competency by successfully completing exit practical and written scenario test outs.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of academic achievement will include a combination of tests, quizzes, assignments, presentations and participation.

General Course Requirements and Recommendations
Students must receive a grade of "C" or better to remain in the Radiographer AAS Degree program.

Grading Scale
The grading scale is:

- 93-100% = A
- 85-92% = B
- 80-84% = C
- 73-79% = D
- 0-72% = E

Texts
Textbook(s) to be determined through program faculty approval.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for RAD 296

REEN110 - Geothermal Sys & Water Furnace Tech

Overview

Subject
Energy Technology

Academic Department
Building Sciences

School
Business, Entrepreneurshp, PD

Course Description
Introduces the topic of geothermal energy, identifies geothermal energy sources, and provides an overview of how geothermal energy is used. Emphasizes residential heating using ground source heat pump technology. Covers the installation of a geothermal furnace in a residential application including an initial survey of the home and property, sizing of the unit, and the choice of the type of loop system to use. Also covers installation and maintenance of a geothermal heating system. Access to a working water furnace system and to on campus geothermal wells is available for laboratory activities.

Credit Hours
2

Total Contact Hours
Total Instructor Contact Hours:
32

Total Student Contact Hours:
32

Course Fee
40

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Introduction to Geothermal Energy.
2. Geothermal Energy Systems in use today.
3. Geothermal Power Generation.
4. Heat Pump Technology.
5. Geothermal Furnace Systems.
6. Site Location Survey for Water Furnace Installation
7. Choice and location of Water Loop.
8. Installation and testing of Loop System.
9. Water Furnace Heating Cycle.
10. Water Furnace Cooling Cycle.
11. Operation dnd Maintenance of a Water Furnace System.
12. Geothermal Energy's Effect on the Environment and Economy.

Define geothermal energy.

Describe how geothermal systems function.

Describe where geothermal energy is used worldwide.

Describe how water furnace systems function.

Define two types of loop systems used in water furnaces.

Perform a survey on a residential application for the installation of a water furnace.

Describe the steps in installation of a water furnace.

Demonstrate the typical operation and maintenance of a water furnace for heating and cooling.

Discuss how the use of geothermal energy will affect the environment and the economy.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Methods for measuring achievement of objectives:

1. Tests will be given throughout the semester. Test scores represent 65% of the course grade.
2. Laboratory activities and performance exercises will be done where students will demonstrate an understanding of practical applications. These will make up 10% of the course grade.
3. A written final exam will be given which will represent 25% of the course grade.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for REEN 110

REEN120 - Wind, Solar, and Fuel Cell Technology

Overview

Subject
Energy Technology

Academic Department
Building Sciences

School
Business, Entrepreneurshp, PD

Course Description
Explores the theory of operation and the practical applications of solar thermal, solar photovoltaic, wind turbine, and fuel cell technologies. Discusses the benefits and drawbacks of alternative energy installations, the technical components of each system, and accommodating siting requirements for each type of installation. Principles of energy conversion, energy efficiency, and energy storage are also addressed.

Credit Hours
2

Total Contact Hours
Total Instructor Contact Hours:
32

Total Student Contact Hours:
32

Course Fee
40

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Introduction to Renewable Energy Systems.
2. Passive solar heating systems.
3. Active solar heating systems / storage and use of solar energy.
4. Solar cells and solar photovoltaic systems / review of electrical systems.
5. Solar cells and solar photovoltaic systems.
6. Photovoltaic lab, set up tear down of photo cell system.
7. Wind systems and wind generation demonstration.
8. Wind system locations and installations.
9. Advantages and disadvantages of wind systems.
10. Fuel cell systems and theory of operation.
11. Fuel cell demonstration.
12. Fuel cell lab, set up, and operation of miniature fuel cell units.
13. Future of fuel cell applications, and automative and residential.
14. Economics of renewable energy.

Differentiate between renewable energy and alternative energy.

Differentiate between passive and active solar systems.

Describe how photovoltaic systems function.

Describe how wind systems function.

Describe how fuel cell systems function.

Explain how fuel cell systems can be applied to automobiles.

Compare site feasiblity of solar panels against wind turbines.

Examine how renewable energy will affect the environment and the economy.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Methods for measuring achievement of objectives:

1. Tests will be given throughout the semester. Test scores represent 65% of the course grade.
2. Laboratory activities and performance exercises will be done where students will demonstrate an understanding of practical applications. These will make up 10% of the course grade.
3. A written final exam will be given which will represent 25% of the course grade.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for REEN 120

REEN130 - Smart Home Control Technology

Overview

Subject
Energy Technology

Academic Department
Building Sciences

School
Business, Entrepreneurshp, PD

Course Description
Examines both the advantages and the drawbacks of using smart home technology. Explores all of the options currently available in the different types of systems and technologies. Topics discussed include the economics of smart home technology, smart home technology and conservation of energy, and how smart home technology can improve standards of living. Demonstrations of the technology and laboratory exercises are included.

Credit Hours
2

Total Contact Hours
Total Instructor Contact Hours:
32

Total Student Contact Hours:
32

Course Fee
40

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Overview of conservation techiques and economic savings using smart home technology.
2. Survey of available companies and products
3. Heating and AC Control
4. Lighting Control
5. Security and Alarm Systems
6. Entertainment Systems
7. Communication and Data Systems
8. Monitoring and Remote Control
9. Wireless Technology
10. Installation in new construction
11. Installation of smart home technologies during remodeling
12. Installation of smart home technologies in existing homes.
13. Local and national building codes governing smart home technology systems
14. Summary, smart home technologies conservation and substantial economic savings.

Define the term, "smart home technology."

Demonstrate how smart home technology can be integrated into a home.

Describe the various technologies available for use today.

Calculate how the use of smart home technology can conserve energy.

Describe how smart home technology can be used along with renewable energy sources such as solar energy systems.

Examine the economics of using smart home technology.

Evaluate how the use of smart home technology can affect the standard of living in a home.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Methods for measuring achievement of objectives:

1. Tests will be given throughout the semester. Test scores represent 65% of the course grade.
2. Laboratory activities and performance exercises will be done where students will demonstrate an understanding of practical applications. These will make up 10% of the course grade.
3. A written final exam will be given which will represent 25% of the course grade.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for REEN 130

REEN140 - Cogeneration and Backup Power

Overview

Subject
Energy Technology

Academic Department
Building Sciences

School
Business, Entrepreneurshp, PD

Course Description
Introduces the topics of cogeneration and backup power for use in a residence or business. Explores the various types of both backup power units and uninterruptible power units available today. Addresses site survey, planning, cost, and the installation and maintenance of the units.

Credit Hours
2

Total Contact Hours
Total Instructor Contact Hours:
32

Total Student Contact Hours:
32

Course Fee
40

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Introduction to cogeneration of power
2. Size and scale of cogeneration systems
3. Economics of power cogeneration
4. Using renewable energy sources for cogeneration
5. Need for uninterruptible power supplies
6. Types of UPS systems
7. Batteries and battery maintenance
8. Maintenance of UPS systems
9. National electrical code requirements for UPS and backup systems
10. Survey and planning for installing a residential backup generator
11. Installation of a residential backup generator system
12. Installation of a residential backup generator system
13. Maintenance of a residential backup generator system
14. Locations of backup power systems

Define the term cogeneration of power.

Describe both the advantages and disadvantages of power cogeneration to either a home or business settings.

Examine the economics of cogeneration power.

Describe how cogeneration of power with sources of renewable energy could affect the environment.

Describe applications where uninterruptible power sources are needed.

Survey a residential location for the feasibility of installation of a backup power unit including sizing and location of the unit.

Describe the steps in installation of a backup power unit.

Demonstrate the typical maintenance of a backup power unit.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Methods for measuring achievement of objectives:

1. Tests will be given throughout the semester. Test scores represent 65% of the course grade.
2. Laboratory activities and performance exercises will be done where students will demonstrate an understanding of practical applications. These will make up 10% of the course grade.
3. A written final exam will be given which will represent 25% of the course grade.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for REEN 140

REEN160 - Energy Auditing/Weatherization

Overview

Subject
Energy Technology

Academic Department
Building Sciences

School
Business, Entrepreneurshp, PD

Course Description
For students seeking to become BPI certified residential energy auditors or to understand the principles of energy auditing. Includes training in the principles of energy transfer, building envelopes, energy auditing, air leakage, insulation, windows and doors, heating systems, cooling systems, indoor air quality, lighting, appliances, and water heating. Students will gain the skills required to perform building inspections and make cost effective recommendations for improving energy efficiency. At the conclusion of this class students will be able to sit for the Building Performance Institute (BPI) theory written test for Building Analyst certification. REEN 161 is the next class for BPI preparation and field certification class. The candidate must pass the REEN 160 class (first twelve weeks of one semester) and BPI written theory test to proceed to REEN 161 (last four weeks of the same semester). Recommend co-requisite of REEN 161.

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
240

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics
1. Introduction to residential energy.
2. Energy and building shell.
3. Air leakage/Insulation.
4. Windows and doors.
5. Heating and cooling.
6. Lighting and appliances.
7. Water heating.
8. Health and safety.

Conduct comprehensive inspections of the energy efficiency of homes.

Analyze date and prepare written reports recommending cost-effective measures for energy improvements.

Describe basic knowledge of construction related to residential dwellings, ability to work with basic tools, heating test equipment, and a blower door.

Demonstrate an understanding of energy use, conservation, and management.

Educate homeowners on energy conservation and sustainability practices.

Describe knowledge of local and state building codes.

Analyze lighting data in order to make money saving calculations.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
1. Tests will be given throughout the semester. Test scores represent 20% of the course grade.
2. Class participation will be 20% of the grade. Presentations will be required.
3. Final exam will be 25% of the grade.
4. Attendance accounts for 10% of the final grade.
5. Field Audits account for 25% of the final grade.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for REEN 160

REEN161 - Energy Aud/Weatherization Certificat Lab

Overview

Subject
Energy Technology

Academic Department
Building Sciences

School
Business, Entrepreneurshp, PD

Course Description
This certification lab class allows students to apply in the field the concepts introduced in REEN 160. Students will learn industry-defined standards, basic energy efficiency improvements, how to evaluate energy consumption, and how to calculate energy costs. Other topics include how to use industry tools to measure energy consumption in residential settings and preparation for the Building Performance Institute (BPI) Building Analyst field exam. Along with the written exam offered in REEN 160, the field exam offered in REEN 161 enables students to complete the BPI certification process. It is strongly recommended that s student pass REEN 160 and the BPI written theory test first before proceeding with REEN 161.

Course Pre-requisite(s)
REEN160 Energy Auditing/Weatherization

Course Co-requisite(s)
REEN160 Energy Auditing/Weatherization

Credit Hours
1

Total Contact Hours
Total Instructor Contact Hours:
16

Total Student Contact Hours:
16

Course Fee
240

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics
1. Field Certification Preparation Lab - Energy Use and Building Shell
2. Field Certification Preparation Lab - Air Leakage/Insulation
3. Field Certification Preparation Lab - Windows and Doors
4. Field Certification Preparation Lab - Heating and Cooling
5. Field Certification Preparation Lab- Lighting and Appliances
6. Field Certification Preparation Lab - Water Heating
7. Field Certification Preparation Lab - Health and Safety

Apply course information in order to pass BPI field certification exam.

Apply concepts of energy conservation related to residential buildings.

Formulate a plan to help consumers resolve heating, cooling and air leakage problems.

Evaluate methods for reducing energy costs and improving building efficiency.

Analyze the overall condition and efficiency of heating and cooling systems.

Analyze the overall efficiency of a home and identify primary areas of air leakage in walls, ceilings and foundations.

Demonstrate energy savings through sealed windows, doors and other openings in the a residential home including fireplaces, attic hatches and electrical outlets.

Prepare a plan for addressing future upgrades to the building including an economic analysis of payback periods for each planned upgrade.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Student academic achievement will be assessed via tests, class participation, final field test exam, and written field audits. All other assessment of student achievement is left up to the discretion of the individual instructors/test proctors.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for REEN 161

REEN170 - Battery Technologies

Overview

Subject
Energy Technology

Academic Department
Building Sciences

School
Business, Entrepreneurshp, PD

Course Description
Covers the development of battery technology over the years. Focuses on applications of emerging technology. Topics include, but are not limited to, battery construction, cell characteristics, electric data, energy density, capacity retention, and cycle life of batteries. Also includes fundamental formulations and design aspects in secondary batteries used in electric propulsion. Provides overview of battery technology including acid, nickel metal hydride, and lithium ion cells with their applications for use in hybrid and electric vehicles. Discusses how to evaluate storage battery technologies, simple voltaic cells with aqueous electrolytes, primary non-rechargeable batteries, and secondary rechargeable batteries. Course work examines developments in stationary and new propulsion systems for hybrid, plug-in hybrid, and electric vehicles.

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
35

Academic Level
Undergraduate

Goals, Topics, and Objectives

Course Goals
This course develops student's knowledge in the advancements of battery technologies for the purpose of encouraging students to pursue opportunities and achievements in the battery technology field.

Core Course Topics
1. Concepts of cells and batteries.
2. Chemical techniques and electrode processes.
3. Concepts in the standardization of batteries.
4. General characteristics and applications of primary batteries.
5. Secondary battery purpose, performance factors, and functions.
6. Power and energy for electric, hybrid, and plug-in vehicle propulsion.
7. Performance, design, and functionality considerations.
8. New developments, innovative designs, chemical processes, and material properties.
9. Battery selection for consumer electronics.

Distinguish and recognize the components of batteries, the classification for types of batteries, and the applications for determining battery usage.

Describe the conversions of chemical energy into electrical energy.

Illustrate battery characteristics, capacity, and energy output that affect battery performance.

Examine regulatory and safety standards and performance factors involved with battery standardization.

Compare design and characteristics of primary batteries, discrete batteries, rechargeable batteries, and secondary batteries.

Categorize the various types of battery electrodes to identify the chemical operation found in the batteries.

Evaluate key criteria in selecting a battery for consumer applications incorporating battery usage, design, and applications.

Explain vehicle integration of hybrid electric vehicles (HEV) batteries and energy storage technologies for hybrid vehicles.

Compare HEV battery performances.

Evaluate future battery methodologies, performance factors, and potential applications.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
- Tests 20%
- Class participation 20%
- Attendance 20%
- Presentations 20%
- Final exam 20%

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for REEN 170

REEN180 - Hydropower

Overview

Subject
Energy Technology

Academic Department
Building Sciences

School
Business, Entrepreneurshp, PD

Course Description
This course examines hydropower as a major component of the world renewable energy mix. This course provides a comprehensive overview of the technical application and social, economic, and environmental implications of hydropower as a method of energy generation. Topics include hydropower plant types, development of new hydropower facilities, retrofitting obsolete power stations, and the role of small scale hydropower.

Credit Hours
2

Total Contact Hours
Total Instructor Contact Hours:
32

Total Student Contact Hours:
32

Course Fee
40

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics
1. Hydropower Development
2. Benefits and Highlights of Hydropower
3. Potential of Hydropower
4. Hydropower and the Environment
5. Hydropower Stations
6. Construction of Hydropower Plants
7. Hydropower Research and Development
8. Economic Opportunities of Hydropower
9. New Hydropower Installations
10. Old Hydropower Electric Systems and Retrofitting Dams to Produce Electricity.

Explain the development of hydro-power.

Examine the benefits of hydro-power.

Evaluate the potential of hydro-power.

Compare and contrast hydro-power locations to the surrounding environment.

Identify the types of hydro-power stations, old and new.

Explain the importance of an adequate water supply.

Recognize the factors related to the construction and assembly of hydro-power plants.

Describe new designs and mechanical concepts in hydro-power.

Evaluate economic and environmental factors related to hydro-power production, new systems and retrofits.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
1. Tests 30%
2. class participation 20%
3. attendance 10%
4. presentations 15%
5. final exam 25%

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for REEN 180

RTH100 - Principles of Respiratory Care

Overview

Subject
Respiratory Therapy

Academic Department
Health, Education, and Human Services

School
Health & Human Services

Course Description
An in-depth study of the cardiopulmonary system from fetal development through old age in health and disease. Topics include Respiratory Care history, cardiopulmonary anatomy and physiology, the effects of aging on the pulmonary system, basic pulmonary assessment and an introduction to basic pulmonary diseases

Course Pre-requisite(s)
Admission to the Respiratory Therapist AAS Degree Program

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. History of Respiratory Care
2. Profession of Respiratory Therapy
3. Gross Anatomy of the Cardiopulmonary System
4. Anatomy & Physiology of the Respiratory System
5. Anatomy & Physiology of the Lung Acinus
6. Physiology of Ventilation
7. Control of Ventilation
8. Introduction to Respiratory Disease
9. Signs and Symptoms of Respiratory Disease
10. Laboratory Tests in Respiratory Disease
11. Basic Assessment of the Pulmonary Patient
12. Chronic Obstructive Pulmonary Disease
13. Asthma
14. Miscellaneous Respiratory Diseases in the Adult

Explain the significant developments leading to the current practice of respiratory care in North America.

Identify the national and state professional organizations for respiratory care.

Discuss the accreditation, credentialing and medical direction aspects of the respiratory care profession.

Discuss the traditional and non-traditional role of Respiratory Therapists in health care.

Describe the gross anatomy of the cardio-respiratory system.

Describe the histology of the respiratory system.

Compare the roles of the diaphragm, accessory muscles and abdominal muscles during the respiratory cycle.

Describe the primary and secondary functions of the major components of the respiratory system.

Differentiate between the pressures and pressure gradients required to create airflow during the respiratory cycle.

Describe the role of airway resistance and respiratory system compliance during the respiratory cycle.

Explain the role of the nervous system in the control of ventilation

Describe the role of the central and peripheral chemoreceptors in the regulation of breathing.

Differentiate the regulation of breathing in individuals with chronic hypercapnia versus healthy persons.

List the major components of a health history.

Evaluate the signs and symptoms of patient values in relation to respiratory disease.

Evaluate laboratory values in relation to respiratory disease.

Identify and describe the components of the chest physical examination.

Evaluate clinical information of a patients overall cardiopulmonary status by inspection, palpation, and auscultation.

List and discuss the diagnostic tests relevant to the development of a respiratory care plan.

Justify the use of low FiO2s in patients with chronic hypercapnia.

Define, identify risk factors, and describe pathophysiology of COPD.

Describe the anatomical alterations and clinical manifestations of COPD.

Define, identify risk factors, and describe pathophysiology of asthma.

Describe the anatomical alterations and clinical manifestations of asthma

Describe the effects of aging on the components of the respiratory system.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment will be based on written exams and one comprehensive final exam.
General Course Requirements and Recommendations
Students must pass this course with a "C" grade or higher to remain in the Respiratory Therapist AAS Degree Program.

Grading Scale
Student grades will be assigned using the following scale:

- 93-100% = A
- 90-92% = A-
- 87-89% = B+
- 83-86% = B
- 80-82% = B-
- 77-79% = C+
- 75-76% = C
- 72-74% = D+
- 60-71% = D
- 59% and below = E

Texts
Textbook(s) to be determined through program faculty approval.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for RTH 100

RTH130 - Therapeutic Procedures

Overview

Subject
Respiratory Therapy

Academic Department
Health, Education, and Human Services

School
Health & Human Services

Course Description
This course provides instruction in beginning therapeutic procedures utilized by the respiratory therapist. Course content includes basic patient and pulmonary assessment, pulse oximetry, basic gas laws, medical gas administration, oxygen therapy delivery systems, and lung expansion techniques. Students practice these procedures in a guided laboratory setting. Course includes 2 hours of lecture and 3 hours of lab each week.

Course Pre-requisite(s)
Admission to the Respiratory Therapist AAS Degree Program

Credit Hours
4

Total Contact Hours
Total Instructor Contact Hours:
84.5

Total Student Contact Hours:
84.5

Course Fee
100

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Vital Signs
2. Basic Pulmonary Assessment
3. Pressure/Volume/Temperature/Flow
4. Medical Gas Therapy
5. Oxygen Therapy
6. Oxygen Analyzers
7. Humidity and Aerosol
8. Home Oxygen Use
9. Lung Expansion Techniques

Describe the components that make up a patients vital signs.

List the normal values for each of the vital signs and common causes of deviation from normal in the adult.

Demonstrate the techniques for obtaining vital signs.

Discuss the operating principles, clinical indications, and limitations of pulse oximetry.

Identify the major components of a health history.

Define the four major chest examination techniques.

Define the terms used to describe breathing patterns during inspection of the chest.

Demonstrate the measurement and calculation of the components of basic pulmonary assessment including lung volumes, lung capacities, minute ventilation, peak expiratory flowrates, and negative inspiratory force.

Contrast solids, liquids, and gases.

Compare and contrast common systems of weights and measurements.

Describe Daltons law of partial pressures.

Identify combined gas law, Boyles law, Charles law, and Gay-Lussacs law.

Describe the physical properties, chemical symbols, and uses of oxygen, air, carbon dioxide, helium, nitric oxide, nitrous oxide, and nitrogen.

Compare and contrast gaseous and liquid storage methods for medical gases.

Discuss the established safety systems for the various equipment connections to ensure the delivery of a specific medical gas.

Calculate the duration of flow for oxygen from a gas and liquid storage system.

Describe the design, use, and troubleshooting of various bulk gas supply systems.

Describe the operation of reducing valves, flow measuring devices and regulators.

Compare low-flow and high-flow oxygen delivery systems.

Describe the various oxygen delivery devices and their use.

Compare and contrast the various oxygen delivery devices and when to apply each type of device.

Describe the principles of operation and indication for the use of oxygen analyzers.

Compare the advantages and disadvantages of humidifiers for patient use during oxygen delivery.

Describe the operation and utilization of bland aerosol delivery systems.

Given a variety of case studies, recommend the appropriate oxygen delivery device and humidity/aerosol deliver system for patient use.

Describe the types and use of home oxygen systems.

Describe cough, deep breathing, and incentive spirometry for the purpose of lung hyperexpansion.

Demonstrate the techniques of deep breathing and incentive spirometry.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment will be based on performance evaluations, lab exams (practical's), worksheets and homework assignments, written exams, a final lab practical and written exam.

Grading Scale
The grading scale is:

- 93-100% = A
- 90-92% = A-
- 87-89% = B+
- 83-86% = B
- 80-82% = B-
- 77-79% = C+
- 75-76% = C
- 72-74% = D+
- 60-71% = D
- 59% and below = E

Texts
To be determined by program faculty.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for RTH 130

RTH160 - Respiratory Therapy Pharmacology

Overview

Subject
Respiratory Therapy

Academic Department
Health, Education, and Human Services

School
Health & Human Services

Course Description
This course focuses on the appropriate and effective administration of respiratory care medications, including an overview of pharmacology, terminology, routes, techniques of administration, and calculation of dosages. The National Asthma Education and Prevention Program (NAEPP) Guidelines for Asthma Management are emphasized.

Course Pre-requisite(s)
RTH100 Principles of Respiratory Care and RTH130 Therapeutic Procedures both with a C or better

Credit Hours
2

Total Contact Hours
Total Instructor Contact Hours:
32

Total Student Contact Hours:
32

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Basic Pharmacological Principles
2. Bronchodilators
3. Calculation of Drug Dosages
4. Aerosol Delivery Devices
5. Inhalation Pharmacology
6. Pharmacological Management of Asthma
7. NAEPP Asthma Management Guidelines
8. Bronchodilator Protocol
9. Ultrasonic Therapy
10. Mucolytics
11. Case Studies

Describe the mechanisms of action, indications, contraindications, side effects, strength, dosage, and route of administration for the following respiratory pharmacological agents: bronchodilators (sympathomimetics, parasympatholytics, and methylxanthines), anti-asthmatic agents (mast cell stabilizers and leukotriene modifiers), anti-inflammatory agents, anti-microbial agents, mucolytics.
Describe the components of Bronchodilator Protocols.
Utilize a Bronchodilator Protocol to select a correct treatment regimen for a variety of case studies.
Calculate drug dosages from solutions whose concentrations are expressed as % strengths.
Compare and contrast jet nebulizers, ultrasonic nebulizers, pressurized metered dose inhalers, and dry powder inhalers for aerosol drug administration.
Discuss issues involved in the selection of a device for aerosol delivery.
Describe the factors that effect aerosol deposition in the lungs.
Discuss the indications, complications, and hazards of aerosol drug therapy.
Distinguish between spacers and valved holding chambers.
Discuss the triggers, pathogenesis, clinical manifestations, and treatment of asthma.
Discuss asthma management according to the NAEPP Guidelines.
Determine the best stepwise approach to manage a patients asthma for a variety of case studies.
Describe ultrasonic nebulizers and their action
Describe mucolytics and their action

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment will be based on quizzes and assignments, & written exams, and a comprehensive final exam.
General Course Requirements and Recommendations
Students must pass this course with a "C" or better to remain in the Respiratory Therapist AAS Degree program.

Grading Scale
Student grades will be assigned using the following scale:

- 93-100% = A
- 90-92% = A-
- 87-89% = B+
- 83-86% = B
- 80-82% = B-
- 77-79% = C+
- 75-76% = C
- 72-74% = D+
- 60-71% = D
- 59% and below = E

Texts
Textbook(s) determined through program faculty approval.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for RTH 160

RTH170 - Therapeutic Procedures II

Overview

Subject
Respiratory Therapy

Academic Department
Health, Education, and Human Services

School
Health & Human Services

Course Description
This course provides instruction in therapeutic procedures utilized by the respiratory therapist. Course content includes airway care, emergency life support, bronchial hygiene therapy, and lung expansion therapy. Students practice these procedures in a guided laboratory setting. Course includes 3 hours of lecture and 2 hours of lab each week.

Course Pre-requisite(s)
RTH100 Principles of Respiratory Care and RTH130 Therapeutic Procedures both with a C or better

Credit Hours
4

Total Contact Hours
Total Instructor Contact Hours:
77

Total Student Contact Hours:
77

Course Fee
100

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Basic Life Support for the Healthcare Provider
2. Pharyngeal and Artificial Airways
3. Suctioning
4. Resuscitation
5. Bronchial Hygiene Therapy
6. Airway Management
7. Intubation and Tracheotomy
8. Endotracheal and Tracheostomy Tubes
9. Bronchoscopy and BAL
10. Lung Expansion Techniques
11. Disease States of the Airway

Demonstrate competency in all course skill requirements for BLS for Healthcare Providers in accordance with the American Heart Association.

Describe the structure, function, clinical indications, hazards and care of patients with adjunct artificial airways.

Describe the assessment process for establishing the need for suctioning.

Discuss the indications, complications, and hazards of the various suctioning techniques.

Demonstrate the procedures for performing each suctioning technique.

Describe the selection, function, use and care of resuscitation equipment including resuscitation bags.

Describe the assessment process for bronchial hygiene therapy.

Discuss the indications, complications, and hazards of each bronchial hygiene therapy technique.

Demonstrate the procedures for performing each bronchial hygiene therapy technique.

Describe the components of Bronchial Hygiene Protocols.

Utilize a Bronchial Hygiene Protocol to develop a correct treatment regimen for a variety of case studies.

Discuss the indications for artificial airways.

Demonstrate the procedures for nasal and oral intubation.

Describe the procedure of tracheotomy.

Describe the physical aspects, indications, hazards and complications of endotracheal and tracheostomy tubes.

Describe the indications, complication and hazards of bronchoscopy procedures.

Discuss bronchoscopy techniques and BAL (Bronchoalveolar lavage).

Discuss the indications, complications and hazards of each lung expansion technique.

Demonstrate the procedures for performing each lung expansion technique.

Describe the components of Lung Expansion Protocols.

Utilize Lung Expansion Protocol to develop a correct treatment regimen for a variety of case studies.

Describe the anatomic alterations of the lungs caused by secretion producing disorders.

Explain the major pathophysiologic mechanisms activated throughout the respiratory system as a result of the anatomic alterations in secretion producing disorders.

Identify the common clinical manifestations that develop as a result of the anatomic alterations and pathophysiologic changes in secretion producing disorders.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of academic achievement will include performance evaluations, worksheets and homework assignments, course exams, lab practical exams, and a final exam.

Grading Scale
Student grades will be assigned using the following scale:

- 93-100% = A
- 90-92% = A-
- 87-89% = B+
- 83-86% = B
- 80-82% = B-
- 77-79% = C+
- 75-76% = C
- 72-74% = D+
- 60-71% = D
- 59% and below = E

Texts
To be determined by program faculty.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for RTH 170

RTH180 - RT Clinical Sciences

Overview

Subject
Respiratory Therapy

Academic Department
Health, Education, and Human Services

School
Health & Human Services

Course Description
This course focuses on the clinical application of science to the practice of respiratory care. Topics include oxygenation, acid-base balance, ventilation in health and disease, basic microbiology, common microbial pathogens seen with pulmonary infection and the physical principles of spontaneous and mechanical ventilation. Emphasis is placed on blood gas interpretation, capnography, arterial puncture techniques, and disinfection and sterilization of respiratory care equipment.

Course Pre-requisite(s)
RTH100 Principles of Respiratory Care and RTH130 Therapeutic Procedures both with a C or better

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Oxygenation
2. Oxygen & CO2 Transportation
3. Acid-Base Homeostasis
4. Blood Gas Classification
5. Obtaining ABG's
6. Blood Gas Electrodes
7. Non-Invasive Monitoring of Oxygenation and Ventilation
8. Basic Microbiology
9. Microbial Pathogens in Pulmonary Disease
10. Sterilization & Disinfection
11. Physics of Ventilation

Explain the physiological basis of oxygenation and ventilation.

Calculate oxygen content for arterial, venous and pulmonary capillary blood.

Describe the methods of oxygen transport.

Explain the significance and factors that affect the oxygen dissociation curve.

Describe the methods used to measure oxygenation.

Differentiate between shunts and deadspace.

Describe the methods of CO2 transport.

Explain the principles relevant to acid-base balance in respiratory care.

Discuss the blood gas parameters that measure ventilation.

Interpret blood gas results, including oxygenation and acid/base parameters.

Describe the indices of oxygenation and ventilation.

Describe the correct procedure for obtaining arterial blood samples.

Describe the various blood gas electrodes and how they work.

Describe the various techniques for non-invasive monitoring of oxygenation and ventilation.

Describe the major organisms causing community-acquired, nosocomial, and ventilator-associated pneumonias.

Explain the different types of interactions that occur between microorganisms and the human body

Describe how the human body defends itself against pathogenic microorganisms.

Describe the various sterilization & disinfection techniques.

Use the Equation of Motion to describe patient-ventilator interaction in mechanical ventilation.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment will be based on assignments, quizzes, exams and a final exam.

General Course Requirements and Recommendations
Students must pass this course with a "C" or better to remain in the Respiratory Therapist AAS Degree Program.

Grading Scale
Student grades will be assigned using the following scale:

- 93-100% = A
- 90-92% = A-
- 87-89% = B+
- 83-86% = B
- 80-82% = B-
- 77-79% = C+
- 75-76% = C
- 72-74% = D+
- 60-71% = D
- 59% and below = E

Texts
Textbook(s) determined through program faculty approval.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for RTH 180

RTH195 - Introduction to Clinical Therapeutics

Overview

Subject
Respiratory Therapy

Academic Department
Health, Education, and Human Services

School
Health & Human Services

Course Description
Selected experience in health care facilities for clinical practice with oxygen delivery systems and basic patient assessment techniques.

Course Pre-requisite(s)
RTH100 Principles of Respiratory Care and RTH130 Therapeutic Procedures both with a grade of C or better

Credit Hours
1.5

Total Contact Hours
Total Instructor Contact Hours:
268

Total Student Contact Hours:
58

Course Fee
75

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Standard Precautions
2. Infection Control
3. Health Insurance Portability and Accountability Act (HIPAA)
4. Basic Patient Assessment
5. Medical Records
6. Oxygen Therapy

Describe standard precautions required in the patient care setting.
Describe infection control procedures required in the patient care setting.
Utilize standard precautions and infection control procedures in the clinical setting.
Delineate Health Insurance Portability and Accountability Act (HIPAA) guidelines used in the patient care setting.
Demonstrate compliance with the Health Insurance Portability and Accountability Act (HIPAA) guidelines when dealing with patients and their medical records in the health care setting.
Demonstrate appropriate professional behaviors when dealing with physicians, hospital staff, fellow students, patients, and patient families.
Assess a patients medical record to extract pertinent information.
Correlate learned theory and techniques to direct patient care included in an oxygen rounds assignment. (i.e. indications for oxygen therapy, equipment, monitoring patients on oxygen, etc.)
Obtain accurate measurements of pulse, pulse oximetry, and respiratory rate utilizing correct technique.
Obtain basic patient assessment findings.
Recommend oxygen therapy changes based on findings of basic patient assessment.
Communicate verbally in language appropriate to patients and professional staff.
Communicate appropriately and accurately in written form in appropriate notes and reports.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Written documentation, observation of clinical practice, weekly clinical logs, shared feedback forms, physician interaction reports, affective final evaluation, and clinical competency evaluations are used to assess attainment of objectives in the area of knowledge, skills, and affective behaviors.

General Course Requirements and Recommendations
Students must pass this course with a "C" or better to remain in the Respiratory Therapist AAS Degree program.

Grading Scale
Student grades will be assigned using the following scale:

- 93-100% = A
- 90-92% = A-
- 87-89% = B+
- 83-86% = B
- 80-82% = B-
- 77-79% = C+
- 75-76% = C
- 72-74% = D+
- 60-71% = D
- 59% and below = E

Texts
To be determined by program faculty.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for RTH 195

RTH210 - Ventilator Management 1

Overview

Subject
Respiratory Therapy

Academic Department
Health, Education, and Human Services

School
Health & Human Services

Course Description
A study of the theories, techniques, and equipment involved in the initiation, maintenance, and discontinuation of mechanical ventilation in the adult patient. Laboratory experiences with a variety of adult mechanical ventilators.

Course Pre-requisite(s)
RTH160 Resp Therapy Pharmacology, RTH170 Therapeutic Procedures II, RTH180 RT Clinical Sciences, RTH195 Intro to Clinical Therapeutics all with a C or better

Credit Hours
4

Total Contact Hours
Total Instructor Contact Hours:
84.5

Total Student Contact Hours:
84.5

Course Fee
75

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Principles of Mechanical Ventilation
2. Theory of Mechanical Ventilation
3. Components of the Ventilator Circuit
4. Compliance and Resistance
5. Modes of Ventilation: Indications and Changing Modes
6. Initiation of Ventilatory Support
7. Initial Ventilator Settings in Volume and Pressure Targeted Ventilation
8. Ventilator Check-Out Procedure
9. Patient Ventilator System Monitoring
10. Recommending Parameter Changes during Mechanical Ventilation
11. Effects and Complications of Mechanical Ventilation
12. Discontinuation and Weaning from Mechanical Ventilation

Describe the normal mechanics by which spontaneous ventilation occurs.

Describe the mechanism of positive pressure ventilation and its effect on body systems.

Discuss the hazards associated with positive pressure ventilation, especially barotrauma and volutrauma.

Compare and contrast volume and pressure targeted/control ventilation.

Discuss the traditional modes of ventilation, each of their uses, advantages and disadvantages.

Identify the criteria to establish the need for mechanical ventilation.

Describe the use of Positive End Expiratory Pressure/Continuous Positive Airway Pressure (PEEP/CPAP) as methods to improve oxygenation.

Discuss the use of patient assessment to improve ventilation.

Discuss the ventilatory techniques and methods used to improve ventilation.

Discuss the appropriate use and setting of alarms in the patient ventilator system.

Explain the methods available to effectively monitor patients on life support.

Identify the waveform patterns utilized in mechanical ventilation.

Describe the information and troubleshooting capabilities of waveform patterns.

Demonstrate the operation of commonly utilized adult mechanical ventilators.

Set-up and demonstrate initial settings, parameter changes and troubleshooting capabilities with mechanical ventilation.

Discuss the use of non-invasive positive pressure ventilation.

Recommend initial ventilator settings and ventilator parameter changes given case studies.

Discuss the primary factors to consider when evaluating a patient for ventilator weaning.

Describe the methods available in the weaning process.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment will be based on completion of assignments, lab practicals, course exams, lab and a comprehensive final exam.

General Course Requirements and Recommendations
Students must pass this course with a "C" or better to remain in the Respiratory Therapist AAS Degree Program.

Grading Scale
Student grades will be assigned using the following scale:

- 93-100% = A
- 90-92% = A-
- 87-89% = B+
- 83-86% = B
- 80-82% = B-
- 77-79% = C+
- 75-76% = C
- 72-74% = D+
- 60-71% = D
- 59% and below = E

Texts
To be determined by program faculty.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for RTH 210

RTH220 - Respiratory Care Neonates & Pediatrics

Overview

Subject
Respiratory Therapy

Academic Department
Health, Education, and Human Services

School
Health & Human Services

Course Description
Introduces the principles of respiratory care for the neonatal or pediatric patient with cardiopulmonary disease or abnormalities. Covers anatomy, physiology, pathophysiology, and assessment of the neonatal and pediatric patient with cardiopulmonary abnormalities and diseases. Offered as an eight-week course.

Course Pre-requisite(s)
RTH210 Ventilator Mgt 1 and RTH289 Clinical Therapies II both with a C grade or better

Credit Hours
1.5

Total Contact Hours
Total Instructor Contact Hours:
24

Total Student Contact Hours:
24

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Pregnancy and Fetal Development
2. High Risk Pregnancy
3. Fetal-Neonatal Transition
4. Neonatal Assessment & Care of the Newborn
5. Neonatal Resuscitation
6. Special Problems in the Newborn
7. Neonatal Pulmonary Disorders
8. Neonatal Congenital Anomalies & Cardiovascular Conditions
9. Pediatric Assessment & Pediatric Pulmonary Disorders

Explain the development and growth of the cardiopulmonary system of the fetus from conception to birth.
Describe the structures and the path of blood flow through fetal circulation.
Describe factors that cause the change from fetal to adult circulation.
Describe the factors that affect the initiation of neonatal breathing.
Discuss the various conditions that can lead to premature birth.
Assign an appropriate APGAR score in related patient scenarios.
Compare cardiopulmonary anatomical and physiological differences among the infant, child, and adult.
Describe the components evaluated during the neonatal physical ex amination.
Discuss the development of complications during and after the birthing process.
Describe each step of the neonatal resuscitation process.
Describe the anatomic alterations of the lungs caused by neonatal/ pediatric disorders encountered by the respiratory thera pist.
Explain the major pathophysiologic mechanisms activated through out the respiratory system as a result of the anatomic alterations.
Explain the various Congenital Anomalies and Cardiovascular conditions in the neonate.
Identify the common clinical manifestations that develop as a result of the anatomic alterations and pathophysiologic changes.
Formulate a treatment plan for selected neonatal/pediatric disorders encountered by the respiratory therapist.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment will be based on course exams, participation, assignment, quizzes, and a final exam.

General Course Requirements and Recommendations
Students must pass this course with a "C" or better to remain in the Respiratory Therapist AAS Degree program.

Grading Scale
Student grades will be assigned using the following scale:

- 93-100% = A
- 90-92% = A-
- 87-89% = B+
- 83-86% = B
- 80-82% = B-
- 77-79% = C+
- 75-76% = C
- 72-74% = D+
- 60-71% = D
- 59% and below = E

Texts
To be determined by program faculty.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for RTH 220

RTH240 - Cardiopulmonary Diagnostics

Overview

Subject
Respiratory Therapy

Academic Department
Health, Education, and Human Services

School
Health & Human Services

Course Description
This course discusses basic pulmonary function testing and electrocardiographic testing. Basic theory and techniques for testing are covered. Students are expected to perform and evaluate these tests for use by the physician. This course is offered as an eight-week course.

Course Pre-requisite(s)
BIO234 Anatomy and Physiology II with a C grade or higher, and permission of the Respiratory Therapist AAS Degree Program Director

Credit Hours
1.5

Total Contact Hours
Total Instructor Contact Hours:
24

Total Student Contact Hours:
24

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Pulmonary Function Testing: Spirometry
2. Pulmonary Function Testing: Lung Volumes
3. Pulmonary Function Testing: Specialty Testing
4. Pulmonary Function Testing: Equipment, Quality Assurance Procedures, etc
5. Cardiac Testing: Electrocardiography

Define the components of forced spirometry measurements.
State normal values for forced spirometry measurements.
Describe the techniques used to obtain forced spirometry measurements.
Recommend the use of pulmonary function testing including forced spirometry, lung volumes, and diffusing capacity.
Define the components of lung volumes, diffusion, and gas distribution measurements.
State normal values for lung volumes, diffusion, and gas distribution measurements.
Describe the techniques used to obtain lung volumes, diffusion, and gas distribution measurements.
Compare and contrast lung volume measurements.
Compare and contrast how indirect methods are used to measure residual volume and capacities containing residual volume.
Recommend the use of specialized pulmonary function testing including pre- and post-bronchodilator testing, bronchial provo cation challenge and cardiopulmonary exercise testing.
Evaluate the accuracy and reliability of pulmonary function tests (PFT).
Interpret pulmonary function tests (PFT) results including normal, obstructive, restrictive, and combined studies.
Describe the function of the electrocardiograph (ECG) and its components.
Explain the use of the electrocardiograph (ECG) in the evaluation of cardiac function.
Identify the electrocardiograph (ECG) pattern for normal patterns and each of the arrhythmias.
Interpret electrocardiograph (ECG) strips.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment will be based on participation, assignments, quizzes, course exams, and a final exam.

General Course Requirements and Recommendations
Students must pass this course with a "C" or better to remain in the Respiratory Therapist AAS Degree program.

Grading Scale
Student grades will be assigned using the following scale:

- 93-100% = A
- 90-92% = A-
- 87-89% = B+
- 83-86% = B
- 80-82% = B-
- 77-79% = C+
- 75-76% = C
- 72-74% = D+
- 60-71% = D
- 59% and below = E

Texts
To be determined by program faculty.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for RTH 240

RTH250 - Advanced Mechanical Ventilation

Overview

Subject
Respiratory Therapy

Academic Department
Health, Education, and Human Services

School
Health & Human Services

Course Description
Emphasizes the assessment and management of respiratory care patients. Students apply techniques and concepts to treat patients with disease states seen in the critical care areas. This lecture/lab course includes advanced mechanical ventilatory techniques for premature neonates through adults. Participants develop treatment plans utilizing patient-driven protocols.

Course Pre-requisite(s)
RTH210 Ventilator Mgt 1 and RTH289 Clinical Therapies II both with a C grade or better

Credit Hours
4

Total Contact Hours
Total Instructor Contact Hours:
84.5

Total Student Contact Hours:
84.5

Course Fee
100

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Neuromuscular Disease
2. Traumatic Injuries: Pneumothorax, Bronchopulmonary Fistula, Chest Wall Injuries, Pulmonary Contusion
3. Acute Lung Injury / Acute Respiratory Distress Syndrome
4. Pneumonia: Community Acquired, Aspiration, Ventilator Associated
5. Burns and Inhalational Injury
6. Pressure Targeted and Volume Guaranteed Ventilation, BiPhasic ventilation, Non-invasive ventilation
7. Pulmonary pathophysiology seen in the critically ill pulmonary patients.
8. Advanced Mechanical Ventilation in Adults
9. Weaning from Mechanical Ventilation and End of Life Management
10. Pharmacological Agents in the Intensive Care Unit (ICU)
11. Mechanical Ventilation of Neonates and Pediatrics
12. Infant Continuous Positive Airway Pressure (CPAP) and High-Flow Nasal Cannula
13. Specialty Treatment and Ventilation in Neonatal and Pediatric Patients

Identify the pathophysiology and common clinical manifestations that develop as a result of neuromuscular disease.

Discuss the causes, respiratory clinical signs and manifestations for traumatic injuries.

Describe the anatomic alterations of the lungs caused by disorders encountered in the critical care areas.

Explain the major pathophysiologic mechanisms activated throughout the respiratory system as a result of the anatomic alterations.

Identify the common clinical manifestations that develop as a result of the anatomic alterations and pathophysiologic changes.

Formulate a treatment plan for selected disorders.

Discuss the causes, respiratory clinical signs and manifestations for pneumonia and aspiration.

Discuss the causes, respiratory clinical signs and manifestations for burns and inhalational injuries.

Recommend initial ventilator settings and appropriate ventilator changes in related patient scenarios.

Discuss the advanced modes of mechanical ventilation, their uses, advantages, and disadvantages.

Describe the methods available in the weaning process including end of life management.

Describe the indications, mechanism of action and delivery of Nitric Oxide for pulmonary hypertension.

Describe the various pharmacologic agents used for patients on mechanical ventilation.

Identify the criteria to establish the need for mechanical ventilation in neonates and children.

Describe the types and modes of ventilation used to ventilate neonates and children.

Explain the methods available to effectively monitor neonates and children on life support.

Describe the anatomic alterations of the lungs caused by prematurity and pulmonary disorders in neonates and pediatric patients.

Demonstrate the operation of commonly utilized neonatal/pediatric mechanical ventilators.

Set-up and demonstrate initial settings, changes, and troubleshooting capabilities with neonatal/pediatric continuous (CMV - continuous mechanical ventilation) life support.

Describe respiratory care procedures in the treatment of infants and children.

Identify the criteria to establish the need for CPAP and High-Flow Nasal Cannula in neonates and children.

Discuss the appropriate use of continuous positive airway pressure (CPAP) and high-flow nasal cannula with neonates and children.

Describe the use of High Frequency Oscillatory Ventilation.

Describe the use of High Frequency Jet Ventilation.

Describe respiratory care procedures in the treatment of neonates, infants and children.

Describe recruitment techniques used in neonates, infants and children.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment will be based on assignments, lab practicals, course exams, and a final exam.

General Course Requirements and Recommendations
This course must be passed with a "C" or better to remain in the Respiratory Therapist AAS Degree program.

Grading Scale
Student grades will be assigned using the following scale:

- 93-100% = A
- 90-92% = A-
- 87-89% = B+
- 83-86% = B
- 80-82% = B-
- 77-79% = C+
- 75-76% = C
- 72-74% = D+
- 60-71% = D
- 59% and below = E

Texts
To be determined by program faculty.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for RTH 250

RTH270 - Therapeutic Clinical Management

Overview

Subject
Respiratory Therapy

Academic Department
Health, Education, and Human Services

School
Health & Human Services

Course Description
This course provides the student an opportunity to apply in simulated settings concepts learned throughout the respiratory therapist program. Students spend time working on computerized clinical case study simulations, selecting appropriate patient information, and managing patients.

Course Pre-requisite(s)
RTH220 Respiratory Care Neo & Pediatr, RTH240 Cardiopulmonary Diagnostics, RTH250 Advance Mechanical Ventilation, and RTH-292 all with a grade of C or better

Credit Hours
2

Total Contact Hours
Total Instructor Contact Hours:
32

Total Student Contact Hours:
32

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. National Board for Respiratory Care (NBRC) Review of Computerized Clinical Simulations
2. Obstructive Lung Diseases
3. Acute Lung Injury & ARDS
4. Post-Operative Case
5. Neuromuscular Disorders
6. Neonatal & Pediatric Disease Management
7. Near Drowning & Inhalation Disease
8. Neonatal Resuscitation Program (NRP) and Pediatric Advanced Life Support (PALS)

Evaluate all patient data to determine the appropriateness of a prescribed respiratory care plan.
Modify a prescribed respiratory care plan to achieve desired patient outcomes.
Develop respiratory care plans in a variety of settings (eg. Protocols).
List the initial ventilator settings in obstructive and restrictive lung disease patients requiring acute application of mechanical ventilation.
Discuss the monitoring and weaning of chronic pulmonary disease patients from mechanical ventilation.
Discuss the ventilator settings in patients with ALI and ARDS.
Describe the changes in ventilation settings and techniques to treat patients with ALI and ARDS.
Describe the initial ventilator settings for post-operative patients with and without prior pulmonary disease.
Discuss weaning of patients requiring post-operative ventilator support.
Discuss monitoring procedures for patients with Neuromuscular Disorders.
Describe ventilation settings and weaning for patients with neuromuscular disorders.
Discuss the treatment regimens for neonatal and pediatric disorders commonly encountered by the respiratory therapist, including persistent fetal circulation, RDS, PPHN, Meconium Aspiration, Croup, Epiglottitis
Describe the methods of ventilation for patients with inhalation disorders.
Discuss the treatment regimens for neonatal and pediatric resuscitation.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment will be based on assignments, computer simulation assignments, and course exams.

General Course Requirements and Recommendations
This course must be passed with a "C" or better to remain in the Respiratory Therapist AAS Degree program.

Grading Scale
Student grades will be assigned using the following scale:

- 93-100% = A
- 90-92% = A-
- 87-89% = B+
- 83-86% = B
- 80-82% = B-
- 77-79% = C+
- 75-76% = C
- 72-74% = D+
- 60-71% = D
- 59% and below = E

Texts
To be determined by program faculty.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for RTH 270

RTH285 - Advanced Respiratory Concepts

Overview

Subject
Respiratory Therapy

Academic Department
Health, Education, and Human Services

School
Health & Human Services

Course Description
A study of the current theory and techniques encountered by the respiratory therapist in a variety of clinical settings. Emphasis is placed on advanced ventilator applications, advanced cardiopulmonary monitoring, pulmonary rehabilitation, smoking cessation and the respiratory care professional's dynamic role in the health care setting.

Course Pre-requisite(s)
RTH220 Respiratory Care Neo & Pediatr, RTH240 Cardiopulmonary Diagnostics, RTH250 Advance Mechanical Ventilation, and RTH-292 with a C grade or higher.

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Advanced Cardiopulmonary life Support (ACLS)
2. Introduction to Hemodynamics
3. Pulmonary Artery Catheters/Derived Hemodynamic Parameters
4. Hemodynamic Clinical Applications
5. Pulmonary Rehabilitation
6. Smoking Cessation
7. Patient Education
8. New therapeutics in Respiratory Care
9. Transitioning to an Entry-Level Respiratory Therapist.

Identify the electrocardiograph(ECG) pattern for each of the arrhythmias required in the study of American Heart Association(AHA) Advanced Cardiac Life Support (ACLS).

Describe the use of drug therapy, pacemakers, and defibrillators in the treatment of cardiac arrhythmias.

Discuss the importance of cardiopulmonary homeostasis.

Describe the hemodynamic principles of the cardiovascular system.

Explain the components of the Pulmonary Artery Catheter, its indications and complications.

Explain the importance of the measurements obtained and derived from the PAP catheter.

Determine Cardiac Outputs.

Interpret hemodynamic calculations.

Discuss a variety of pharmacological agents influence on the cardiopulmonary system

Recommend a therapeutic plan based on a patients hemodynamic status.

Describe the goals and objectives pulmonary rehabilitation aims to achieve.

Discuss the indications, contraindications, and hazards associated with pulmonary rehabilitation.

Describe the evaluation and selection process of patients to a pulmonary rehabilitation program.

State the rationale for patient education in the practice of respiratory care.

Identify the major components of the patient education process.

Discuss the most recent research, technology, and/or procedures in the field of respiratory care.

Prepare a resume package.

Apply techniques that will improve job-seeking skills.

Analyze factors that influence job retention.

Prepare to complete the NBRC examinations for becoming an RRT.

Discuss tools needed to apply for NBRC examinations and LARA licensure.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of academic achievement will be based on assignments, project, course exams, NBRC Self-Assessment Exams and a final exam.

General Course Requirements and Recommendations
This course includes the NBRC self-assessment exit examinations that must be passed to successfully complete this course. All RTH courses must be completed with a "C" grade or higher.

Grading Scale
Student grades will be assigned using the following scale:

- 93-100% = A
- 90-92% = A-
- 87-89% = B+
- 83-86% = B
- 80-82% = B-
- 77-79% = C+
- 75-76% = C
- 72-74% = D+
- 60-71% = D
- 59% and below = E

Texts
Textbook(s) determined through program faculty approval.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for RTH 285

RTH288 - Intermediate Clinical Therapies

Overview

Subject
Respiratory Therapy

Academic Department
Health, Education, and Human Services

School
Health & Human Services

Course Description
Development of the clinical skills related to airway management, bronchial hygiene, resuscitation procedures, and oxygenation. Students evaluate, modify, and monitor patients' responses to respiratory care regimens. A seven-week directed clinical experience in selected clinical sites.

Course Pre-requisite(s)
RTH160 Resp Therapy Pharmacology, RTH170 Therapeutic Procedures II, RTH180 RT Clinical Sciences, RTH195 Intro to Clinical Therapeutics, and BIO234 Anatomy and Physiology II - all courses with a grade of "C" or better.

Credit Hours
2

Total Contact Hours
Total Instructor Contact Hours:
104

Total Student Contact Hours:
104

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Patient Assessment, Oxygen Therapy, and Pulse Oximetry
2. Bronchial Hygiene
3. Bronchodilator Therapy
4. Generalized Patient Care Procedures
5. Infection Control
6. Airway Management and Cardiopulmonary Resuscitation
7. Lung Expansion Therapy
8. Arterial Blood Gas

Select the proper mode of administration, and set-up and assure proper function of the selected oxygen delivery device.

Monitor the patient's response to the prescribed oxygen therapy, and recommend changes in the approach taken according to individual patient needs.

Evaluate a patient's oxygenation and ventilator status through the use of patient assessment skills, pulmonary mechanics, pulse oximetry, and/or arterial blood gas (ABG) results.

Deliver bronchial hygiene therapy according to departmental procedure.

Monitor the patient's response and alter the bronchial hygiene therapy according to the individual patient needs.

Recommend the appropriate aerosol and/or bronchodilator therapy.

Deliver aerosol and/or bronchodilator therapy according to departmental procedure.

Monitor the patient's response and alter the aerosol and/or bronchodilator treatment regimen according to the individual patient needs.

Recommend the appropriate bronchial hygiene therapy.

Incorporate the general floor respiratory care techniques during a typical shift assignment.

Demonstrate compliance with the Health Insurance Portability and Accountability Act (HIPAA) guidelines when dealing with patients and their medical records in the health care setting.

Apply appropriate professional behaviors when dealing with physicians, hospital staff, fellow students, patients, and patient families.

Communicate verbally in language appropriate to patients and professional staff.

Communicate appropriately and accurately in written form in appropriate notes and reports.

Utilize standard precautions and infection control procedures in the clinical setting.

Maintain patent airway, provide emergency care, cardiopulmonary resuscitation (CPR), or some portion of CPR as required in the clinical situation.

Recommend the appropriate lung expansion therapy.

Deliver lung expansion therapy according to departmental procedure.

Monitor the patient's response and alter the lung expansion therapy according to the individual patient needs.

Demonstrate the proper procedure for obtaining an arterial blood sample through arterial puncture.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Written documentation, observation of clinical practice, weekly clinical logs, shared feedback forms, affective final evaluation, and clinical competency evaluations assessing students in the areas of knowledge, skills, and affective behavior are used to assess attainment of objectives.

Grading Scale

- 93-100% = A
- 90-92% = A-
- 87-89% = B+
- 83-86% = B
- 80-82% = B-
- 77-79% = C+
- 75-76% = C
- 72-74% = D+
- 60-71% = D
- 59% and below = E

Texts
To be determined by program faculty.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for RTH 288

RTH295 - Clinical Therapeutics Practicum

Overview

Subject
Respiratory Therapy

Academic Department
Health, Education, and Human Services

School
Health & Human Services

Course Description
Directed clinical experience that develops therapeutic clinical skills for critical care areas and diagnostic labs. Emphasis is on assessing needs, designing care plans, and implementing and evaluating the procedures especially for mechanical ventilator support and systemic oxygenation. Fifteen hours per week.

Course Pre-requisite(s)
RTH210 Ventilator Mgt 1 and RTH289 Clinical Therapies II both with a C or better

Credit Hours
7

Total Contact Hours
Total Instructor Contact Hours:
107

Total Student Contact Hours:
315

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Initiating & Monitoring Mechanical Ventilatory Support
2. Specialty clinical rotation
3. Communication
4. Clinical Procedures in Respiratory Care

Determine the indication for mechanical ventilation.

Assemble and verify proper function of the ventilator before placement on the patient.

Initiate, conduct and modify prescribed ventilator settings including modes of ventilation to achieve adequate acid/base balance, ventilation and oxygenation while monitoring patient's response to respiratory therapy.

Evaluate a patient's ventilation and oxygenation status through the use of invasive and noninvasive monitoring including but not limited to patient assessment skills, pulse oximetry, capnography, electrocardiography (ECG), bedside pulmonary mechanics, Arterial Blood Gas (ABG) results and/or hemodynamic parameters.

Demonstrate a comprehensive patient-ventilator system check.

Correlate learned theory and techniques and apply that knowledge to direct patient care included in a critical care assignment. (i.e. ventilatory support, equipment, monitoring patients, etc.)

Use correct universal precautions and infection control procedures in the clinical setting.

Observe Pulmonary Diagnostic testing

Discuss the role of the Respiratory Therapist in Pulmonary Rehabilitation

Discuss Home Care modalities for Respiratory Care

Apply appropriate modalities for patients in Long Term Care Facilities

Communicate verbally in language appropriate to patients and professional staff.

Communicate appropriately and accurately in written form in appropriate notes and reports.

Demonstrate compliance with the Health Insurance Portability and Accountability Act (HIPPA) guidelines when dealing with patients and their medical records in the health care setting.

Apply appropriate professional behaviors when dealing with physicians, hospital staff, fellow students, patients & patient families.

Demonstrate the proper procedure for arterial blood sampling through arterial puncture and arterial line sampling.

Incorporate all respiratory modalities as required during a typical shift assignment.

Conduct therapeutic procedures to achieve maintenance of a patent airway, removal of bronchopulmonary secretions, adequate spontaneous ventilation and/or arterial and tissue oxygenation according to individual patient needs.

Provide emergency care, cardiopulmonary resuscitation or some portion of the procedures involving patients to include intubation, extubation, bronchoscopies, and transport for special procedures.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Written documentation, observation of clinical practice, weekly clinical logs, shared feedback forms, physician interaction reports, affective and clinical management final evaluations, and clinical competency evaluations are used to assess attainment of objectives in the area of knowledge, skills, and affective behaviors.

General Course Requirements and Recommendations
Students must pass this course with a "C" grade or higher to remain in the Respiratory Therapist AAS Degree program.

Grading Scale
Student grades will be assigned using the following scale:

- 93-100% = A
- 90-92% = A-
- 87-89% = B+
- 83-86% = B
- 80-82% = B-
- 77-79% = C+
- 75-76% = C
- 72-74% = D+
- 60-71% = D
- 59% and below = E

Texts
To be determined by program faculty.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for RTH 295

RTH298 - Advanced Clinical Therapeutics Practicum

Overview

Subject
Respiratory Therapy

Academic Department
Health, Education, and Human Services

School
Health & Human Services

Course Description
Directed clinical experience that further develops the clinical skills and techniques used to manage patients requiring mechanical ventilator support in the hospital, sub-acute and home care settings. Twenty-four hours per week.

Course Pre-requisite(s)
RTH220 Respiratory Care Neo & Pediatr, RTH240 Cardiopulmonary Diagnostics, RTH250 Advance Mechanical Ventilation, and RTH292 - Missing course all with a C grade or higher.

Credit Hours
7

Total Contact Hours
Total Instructor Contact Hours:
107

Total Student Contact Hours:
315

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Management of Mechanical Ventilatory Support
2. Diagnostic Testing
3. Pulmonary Rehabilitation
4. Special Procedures
5. Home Care
6. Neonatal / Pediatrics.
7. Communication & Professional Behaviors

Determine the indication for mechanical ventilation.

Assemble and verify proper function of the ventilator before placement on the patient.

Initiate, conduct and modify prescribed ventilator settings including modes of ventilation to achieve adequate acid/base balance, ventilation and oxygenation while monitoring patient's response to respiratory therapy.

Recommend, institute and modify weaning procedures based on patient's response.

Conduct therapeutic procedures to achieve maintenance of a patent airway, removal of bronchopulmonary secretions, adequate spontaneous ventilation and/or arterial and tissue oxygenation according to individual patient needs. Demonstrate a comprehensive patient-ventilator system check.

Incorporate all respiratory care modalities during a typical shift assignment.

Evaluate a patient's ventilation/oxygenation status through the use of invasive and noninvasive monitoring including but not limited to: patient assessment skills, pulse oximetry, capnography, electrocardiography (ECG), bedside pulmonary mechanics, Arterial Blood Gas (ABG) results and/or hemodynamic parameters.

Recommend and/or make necessary modifications in therapeutic procedures, and ventilatory support based on patient's response. Provide emergency care, cardiopulmonary resuscitation or some portion of the procedures involving patients to include intubation, extubation, bronchoscopy and transport for special procedures.

Demonstrate the proper procedure for arterial blood sampling through arterial puncture and arterial line sampling.

Discuss Pulmonary rehabilitation techniques and application for the patient.

Discuss special procedures in the critically ill patient.

Discuss Home Care equipment and application.

Discuss Neonatal and Pediatric Respiratory Care therapeutics.

Comply with the Health Insurance Portability and Accountability Act (HIPPA) guidelines when dealing with patients & their medical records in the health care setting.

Apply appropriate professional behaviors when dealing with physicians, hospital staff, fellow students, patients & patient families.

Demonstrate correct use of universal precautions and infection control procedures in the clinical setting.

Correlate learned theory and techniques and apply that knowledge to direct patient care included in a critical care assignment. (i.e. ventilatory support, equipment, managing patients, etc.)

Communicate verbally in language appropriate to patients and professional staff.

Communicate appropriately and accurately in written form in appropriate notes and reports.

Demonstrate professional behaviors appropriate to the registered respiratory therapist.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Written documentation, observation of clinical practice, weekly clinical logs, shared feedback forms, physician interaction reports, affective and clinical management, final evaluations, and clinical competency evaluations are used to assess attainment of objectives in the area of knowledge, skills, and affective behaviors.

General Course Requirements and Recommendations
Students must pass this course with a "C" or better to remain in the Respiratory Therapist AAS Degree program.

Grading Scale
Student grades will be assigned using the following scale:

- 93-100% = A
- 90-92% = A-
- 87-89% = B+
- 83-86% = B
- 80-82% = B-
- 77-79% = C+
- 75-76% = C
- 72-74% = D+
- 60-71% = D
- 59% and below = E

Texts
To be determined by program faculty.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for RTH 298

SCI210 - Intro to Science for Elementary Educator

Overview

Subject
Biology

Academic Department
Biological Science

School
Science, Tech, Engr & Math

Course Description
An inquiry based course that provides students a broad overview of both science instruction and the process of science. Students will investigate, discuss and design experiments using the group inquiry method of instruction. This is the first science course in a sequence intended for pre-service elementary school education majors. Two combined classroom/lab sessions per week.

Credit Hours
4

Total Contact Hours

Total Instructor Contact Hours:
62

Total Student Contact Hours:
62

Course Fee
30

Academic Level
Undergraduate

General Education Category
Natural Sciences

Michigan Transfer Agreement (MTA) Category
Category 6: Natural Sciences - Applied Degrees, Category 6: Natural Sciences - Transfer Degrees - Lecture and Lab

Goals, Topics, and Objectives

Core Course Topics

1. Observation and Measurement using the Metric system
2. Inferences and Predictions, Theories and Laws
3. Design of an experiment, identifying and isolating variables
4. Hypothesis formation and testing
5. Critiquing of a scientific experiment
6. Graphing and presenting data
7. Reading and interpreting graphs, charts and tables
8. Presenting a student designed experiment
9. Use the skills above to learn and present material in life science, environmental science, and human biology
10. Use the skills above to learn and present material in physical science, electricity, and energy
11. Use the skills above to learn and present material in earth science.

Design and conduct basic scientific investigations.

Develop solutions to problems through observation, reasoning, and investigations.

Manipulate simple scientific instruments that aid in observation and data collection.

Use simple metric measurement devices to obtain data for use in scientific investigations.

Develop science process skills for information gathering and problem solving.

Construct charts, graphs, and reports from classroom generated data.

Use multimedia sources of information in support of experimental investigations.

Synthesize scientific information from reference books and other sources of technical information.

Diagram procedures in the form of step-by-step instructions, formulas, flow diagrams, and sketches.

Discuss topics in groups by making clear presentations, restating or summarizing what others have said and asking for clarification and elaboration.

Develop an awareness of the need for scientific evidence when interpreting data.

Generate questions about the physical and living world based on observation.

Generate answers to questions that can be investigated empirically.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of academic achievement will be based on class participation, class readings, examinations, e-portfolio submissions, and various class assignments.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for SCI 210

SCI212 - Earth Science for Educators

Overview

Subject
Science Education

Academic Department
Biological Science

School
Science, Tech, Engr & Math

Course Description
An inquiry-based course covering topics in the earth sciences - geology, meteorology, and astronomy. Course content is designed to give students a thorough familiarity with concepts critical to teaching earth science at the K-6 level. The course emphasizes three skills: investigation, critical thinking, and organization. Learning is primarily through student inquiry and discovery of core concepts, with guidance and facilitation provided by the instructor. Two combined classroom/lab sessions per week.

Course Pre-requisite(s)
Eligible to take gateway MATH course at HFC or a satisfactory score on the Math placement exam.

Credit Hours
4

Total Contact Hours

Total Instructor Contact Hours:
62

Total Student Contact Hours:
62

Course Fee
30

Academic Level
Undergraduate

General Education Category
Natural Sciences

Michigan Transfer Agreement (MTA) Category
Category 6: Natural Sciences - Applied Degrees, Category 6: Natural Sciences - Transfer Degrees - Lecture and Lab

Goals, Topics, and Objectives

Core Course Topics

1. Minerals
2. Rocks
3. Plate Tectonics
4. Geologic Time
5. The Atmosphere
6. Earth-Sun Relations
7. Air Circulation
8. Atmospheric Moisture
9. Clouds
10. Weather Patterns
11. Storms
12. History of Astronomy
13. Celestial Motion
14. The Moon
15. The Solar System
16. The Sun
17. Light
18. The Universe

Describe the Earth's surface.

Explain how the Earth's features change over time.

Analyze the effects of technology on the Earth's surface and resources.

Describe the characteristics of water and where it is found on the Earth's surface.

Describe how water moves.

Analyze the interaction of human activities with the hydrosphere.

Describe what makes up weather and how it changes over various time frames.

Explain what causes different types of weather.

Analyze the relationships between human activities and the atmosphere.

Discuss similarities and differences between our planet and sun and other planets and star systems.

Explain how solar system objects move.

Explain scientific theories on the origin of the solar system.

Explain how humans learn about the universe.

Design questions that provide new information about the world.

Critique reports and presentations of other students, providing a balanced assessment of positive and negative points.

Design investigations using appropriate methods and techniques.

Demonstrate appropriate use of technology in communicating findings of investigations.

Analyze claims for scientific merit and explain how scientists decide what constitutes scientific knowledge.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Student mastery of course content will be assessed using the following tools:

1. Oral presentations of findings from experiments and investigations.
2. Reports:
    1. Periodic written reports summarizing and analyzing class discussions.
    2. Critique of discussion reports by other students in "working groups," semester-long cohorts of 3-5 students who will assess one another's work before it is turned in to the instructor.
3. Periodic instructor review of student working group critiques to ensure students have grasped the purpose and technique of assessing another's work.
4. Periodic instructor review of student notes and folders to ensure adequate awareness of class discussions and proper organization of course materials.
5. Three exams, one at the end of each course unit, each involving an oral and a written component. The oral component will consist of a presentation on findings from the student's unit-long research into a particular topic that bridges the unit subject and some aspect of K-6 education. The written component will cover relevant fundamentals from the unit and application of education techniques and critical thinking skills to those fundamentals.
6. Development by each student of an e-portfolio, which will contain three components:
    1. Scientific Literacy: A written documentation of growth of the student's personal knowledge in the earth sciences, and previous misconceptions about science that the student has corrected during the course.
    2. Science Standards: Design an activity that would be appropriate for teaching a particular earth science concept, chosen from the Michigan Curriculum Framework Science Benchmarks, to elementary school students.
    3. Science/Technology/Society, a description of a current scientific controversy and a defense of one side of this controversy using well-reasoned arguments supported by evidence from external sources.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for SCI 212

SCI213 - Learning By Inquiry: Life Science

Overview

Subject
Science Education

Academic Department
Biological Science

School
Science, Tech, Engr & Math

Course Description
An inquiry based course covering the necessary tools, knowledge, and motivation to teach basic biological concepts. Topics include how to integrate major biological themes, and how the topics covered in the course fulfill the National Science Education Standards. At least one field trip is required. Two combined classroom/lab sessions per week.

Credit Hours
4

Total Contact Hours
Total Instructor Contact Hours:
62

Total Student Contact Hours:
62

Course Fee
30

Academic Level
Undergraduate

General Education Category
Natural Sciences

Michigan Transfer Agreement (MTA) Category
Category 6: Natural Sciences - Applied Degrees, Category 6: Natural Sciences - Transfer Degrees - Lecture and Lab

Goals, Topics, and Objectives

Core Course Topics

1. Characteristics of Life
   - Design age-appropriate modules that would be accessible to K-12 age students, and that would help them understand the difference between living and nonliving things.
2. Cell Structure and function
   - Diagram various types of cells.
   - Discuss the function of various cell components.
3. Habitats
   - Explain the scientific definition of a habitat.
   - Analyze the components of a habitat.
   - Assess how organisms in a particular habitat are adapted to it.
4. Human impact on the environment
   - Evaluate current controversies surrounding human environmental impact.
   - Design exercises that would allow K-12 age students to understand how scientists measure environmental change.
5. Photosynthesis
   - Explain the role of photosynthetic organisms in the global food web.
   - Design experiments showing how photosynthesis works.
6. Food chains and food webs
   - Describe how energy is transferred in food chains and webs.
   - Design a project in which K-12 students would find and analyze examples of how humans have altered food chains and webs.
7. Community relationships
   - Explain the components of a biological community and how they are interconnected.
8. Life cycles
   - Evaluate the differences between several types of life cycles.
   - Design an experiment appropriate for K-12 students that tests how well an organism's life cycle is adapted to its habitat.
9. Genetics
   - Evaluate the roles of genes, chromosomes, DNA, and amino acids in determining an organism's physical characteristics.
10. Evolution
    - Discuss what evolution is and is not.
    - Design experiments in which students can observe evolution's effects on a population.
11. Natural Selection
    - Explain why natural selection is a passive, rather than an active, process.
    - Design an exercise, appropriate for K-12 students, showing how natural selection works.
12. Classification of organisms
    - Explain the importance of a standard biological nomenclature system.
    - Assess an organism's traits in order to determine the appropriate classification.
13. Digestion & excretion
    - Explain the differences between the digestive and excretory systems of various types of animals.
14. Animal and plant transport systems
    - Evaluate the differences between animal and plant transport systems.
    - Diagram a typical transport system for an animal and for a plant.
15. Circulatory systems
    - Analyze the components of animal and plant circulatory systems.
    - Design an experiment that shows how a circulatory system works.
16. Gas exchange in animals
    - Design an experiment that illustrates gas exchange through a membrane.
    - Explain how gas exchange works.
    - Discuss why gas exchange is important for life systems.
17. Reproductive strategies
    - Analyze various reproductive strategies for plants and animals.
    - Explain how a given strategy increases the chance for a lineage to survive.

Design age-appropriate modules that would be accessible to K-12 age students, and that would help them understand the difference between living and nonliving things.

Diagram various types of cells.

Discuss the function of various cell components.

Explain the scientific definition of a habitat.

Analyze the components of a habitat.

Assess how organisms in a particular habitat are adapted to it.

Evaluate current controversies surrounding human environmental impact.

Design exercises that would allow K-12 age students to understand how scientists measure environmental change.

Explain the role of photosynthetic organisms in the global food web.

Design experiments showing how photosynthesis works.

Describe how energy is transferred in food chains and webs.

Design a project in which K-12 students would find and analyze examples of how humans have altered food chains and webs.

Explain the components of a biological community and how they are interconnected.

Evaluate the differences between several types of life cycles.

Design an experiment appropriate for K-12 students that tests how well an organism's life cycle is adapted to its habitat.

Evaluate the roles of genes, chromosomes, DNA, and amino acids in determining an organism's physical characteristics.

Discuss what evolution is and is not.

Design experiments in which students can observe evolution's effects on a population.

Explain why natural selection is a passive, rather than an active, process.

Design an exercise, appropriate for K-12 students, showing how natural selection works.

Explain the importance of a standard biological nomenclature system.

Assess an organism's traits in order to determine the appropriate classification.

Explain the differences between the digestive and excretory systems of various types of animals.

Evaluate the differences between animal and plant transport systems.

Diagram a typical transport system for an animal and for a plant.

Analyze the components of animal and plant circulatory systems.

Design an experiment that shows how a circulatory system works.

Design an experiment that illustrates gas exchange through a membrane.

Explain how gas exchange works.

Discuss why gas exchange is important for life systems.

Analyze various reproductive strategies for plants and animals.

Explain how a given strategy increases the chance for a lineage to survive.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Students will be evaluated both objectively and subjectively based on examinations, quizzes, homework assignments, lab exercises and experimental design.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for SCI 213

SCO190 - Co-op in Science

Overview

Subject
Science Education

Academic Department
Biological Science

School
Science, Tech, Engr & Math

Course Description
Cooperative education is a structured method of combining classroom-based education with practical work experience. A cooperative education experience, commonly known as a "co-op," provides academic credit for structured employment experience. Work experience must be directly related to the student's declared major in STEM to be eligible.To register for this course, a student must have completed 50% of core coursework, maintain an overall GPA of 2.0 and a program specific GPA of 2.5.

Course Pre-requisite(s)
Permission from Career Services Officer or Job Developer in the Office of Career Services and permission from the Dean or Associate Dean of the School of STEM.

Credit Hours
1

Total Contact Hours
Total Instructor Contact Hours:
3

Total Student Contact Hours:
75

Academic Level
Undergraduate

Goals, Topics, and Objectives

Course Goals
Cooperative education helps students make the school-to-work transition, develop career and program-related learning objectives, and work on applicable skills for employment. Placements should provide students with the opportunity to apply and expand upon knowledge learned in the classroom, and develop the skills acquired in their coursework to align with the standards and expectations set by the worksite.

Core Course Topics

1. Core Career-Focused Topics:
    - Resume Building
    - Professional Dress and Demeanor (attitude, posture, courteousness)
    - Workplace Communication
    - Interviewing Skills
    - Networking and Social Media
    - Seeking Employment
    - Career Advancement

1-3 program specific learning objectives will be developed by the instructor for each individual offering.

Students will create 1-3 learning objectives per credit to be approved by instructor for each individual offering.

Build a resume that meets standards of Career Services Officer.

Attend a career workshop in professional dress.

Articulate the reasons for professional attire.

Wear professional attire while on the worksite.

Display appropriate professional attitude and demeanor while on the worksite.

Interview effectively.

Participate in a mock interview and give appropriate answers to five questions.

Complete a written job application in a prompt, professional manner with all information legible, error-free, and thorough.

Display an understanding of the appropriate use of Social Media sites during a Career Services workshop.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment will be determined by the instructor based on what is in the best interest of the student's academic growth, including future employability of the student. Assessment may include, but is not limited to:

- Weekly journal
- Participation in a career-focused workshop
- Consistent and prompt attendance at worksite
- Reflective paper
- Interview
- Presentation
- Final project
- Employer evaluation

General Course Requirements and Recommendations
A course syllabus will be developed by the instructor each semester the course is offered. The syllabus will include the standardized co-op Core-Career Focused Topics as well as Program-defined, Student-defined, and Career Services-defined learning objectives.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for SCO 190

SCO290 - Co-op in Science

Overview

Subject
Science Education

Academic Department
Biological Science

School
Science, Tech, Engr & Math

Course Description
Cooperative education is a structured method of combining classroom-based education with practical work experience. A cooperative education experience, commonly known as a "co-op," provides academic credit for structured employment experience. Work experience must be directly related to the student's declared major in STEM to be eligible.To register for this course, a student must have completed 50% of core coursework, maintain an overall GPA of 2.0 and a program specific GPA of 2.5.

Course Pre-requisite(s)
Permission from Career Services Officer or Job Developer in the Office of Career Services and permission from the Dean or Associate Dean of the School of STEM.

Credit Hours
2

Total Contact Hours

Total Instructor Contact Hours:
3

Total Student Contact Hours:
150

Academic Level
Undergraduate

Goals, Topics, and Objectives

Course Goals
Cooperative education helps students make the school-to-work transition, develop career and program-related learning objectives, and work on applicable skills for employment. Placements should provide students with the opportunity to apply and expand upon knowledge learned in the classroom, and develop the skills acquired in their coursework to align with the standards and expectations set by the worksite.

Core Course Topics

1. Core Career-Focused Topics:
    - Resume Building
    - Professional Dress and Demeanor (attitude, posture, courteousness)
    - Workplace Communication
    - Interviewing Skills
    - Networking and Social Media
    - Seeking Employment
    - Career Advancement

1-3 program specific learning objectives will be developed by the instructor for each individual offering.
Students will create 1-3 learning objectives per credit to be approved by instructor for each individual offering.
Build a resume that meets standards of Career Services Officer.
Attend a career workshop in professional dress.
Articulate the reasons for professional attire.
Wear professional attire while on the worksite.
Display appropriate professional attitude and demeanor while on the worksite.
Interview effectively.
Participate in a mock interview and give appropriate answers to five questions.
Complete a written job application in a prompt, professional manner with all information legible, error-free, and thorough.
Display an understanding of the appropriate use of Social Media sites during a Career Services workshop.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment will be determined by the instructor based on what is in the best interest of the student's academic growth, including future employability of the student. Assessment may include, but is not limited to:

- Weekly journal
- Participation in a career-focused workshop
- Consistent and prompt attendance at worksite
- Reflective paper
- Interview
- Presentation
- Final project
- Employer evaluation

General Course Requirements and Recommendations
A course syllabus will be developed by the instructor each semester the course is offered. The syllabus will include the standardized co-op Core-Career Focused Topics as well as Program-defined, Student-defined, and Career Services-defined learning objectives.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for SCO 290

SOC131 - Introduction to Sociology

Overview

Subject
Sociology

Academic Department
Social Sciences

School
Liberal Arts

Course Description
Introduces the sociological approach to understanding culture and society. Examines human behavior in a group context, focusing on the prominent influence of culture and social structure on individuals. Connections between individuals and a variety of social institutions, such as the economy, government, and mass media, are examined and compared in U.S. society and on a global scale. Focuses on cultural diversity and social inequalities, such as those related to class, race, ethnicity and gender.

Course Pre-requisite(s)
Eligible to take ENG courses at HFC.

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
10

Academic Level
Undergraduate

General Education Category
Social Sciences

Michigan Transfer Agreement (MTA) Category
Category 4: Social Sciences - Applied Degrees, Category 4: Social Sciences - Transfer Degrees

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
Determined by department

Goals, Topics, and Objectives

Core Course Topics

1. Introduction to the Sociological Perspective/Imagination

   a. Describe what it means to use the sociological perspective.
   b. Describe what it means to say that reality is socially constructed.
   c. Distinguish between different approaches/theories in sociology.

2. Culture

   a. Illustrate ways that culture influences human behavior.
   b. Describe ethnocentrism.
   c. Discuss and illustrate major cultural components that shape social life.

3. Social Structure

   a. Define and illustrate statuses and roles.
   b. Describe characteristics of social structure at the micro level, e.g. social groups.
   c. Describe one major social institution (e.g. economy, political system, family, health care system, religion, etc.) and how it shapes social life.

4. Research Methods

   a. Describe the characteristics of participant observation/ethnographic methods.
   b., Describe the characteristics of experimental methods.
   c. Describe the characteristics of survey research methods.

5. Social Stratification and Social Class Inequality

   a. Describe social stratification.
   b. Identify social classes in the United States.
   c. Distinguish social stratification from social mobility.

6. Gender Inequality

   a. Distinguish between sex and gender.
   b. Illustrate the process of gender role socialization.
   c. Describe patterns of gender inequality.

7. Racial/Ethnic Inequality

   a. Distinguish between race and ethnicity.
   b. Identify historical patterns of racial/ethnic inequality.
   c. Identify and discuss major issues related to racial/ethnic/cultural diversity.

8. Critical Thinking Learning Objective*

   a. Demonstrate the use of a sociological perspective, by explaining and illustrating the application of sociological concepts in the analysis of a reading, video or classroom activity.

Describe what it means to use the sociological perspective.
Describe what it means to say that reality is socially constructed.
Distinguish between different approaches/theories in sociology.
Illustrate ways that culture influences human behavior.
Describe ethnocentrism.
Discuss and illustrate major cultural components that shape social life.
Define and illustrate statuses and roles.
Describe characteristics of social structure at the micro level, e.g. social groups.
Describe one major social institution (e.g. economy, political system, family, health care system, religion, etc.) and how it shapes social life.

Describe the characteristics of participant observation/ethnographic methods.

Describe the characteristics of experimental methods.

Describe the characteristics of survey research methods.

Describe social stratification.

Identify social classes in the United States.

Distinguish social stratification from social mobility.

Distinguish between sex and gender.

Illustrate the process of gender role socialization.

Describe patterns of gender inequality.

Distinguish between race and ethnicity.

Identify historical patterns of racial/ethnic inequality.

Identify and discuss major issues related to racial/ethnic/cultural diversity.

Demonstrate the use of a sociological perspective, by explaining and illustrating the application of sociological concepts in the analysis of a reading, video or classroom activity.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement

- Each instructor will identify and implement appropriate methods to assess the achievement of the learning objectives for the course.
- All instructors teaching SOC131 Introduction to Sociology will include a set of common multiple-choice and one essay question on the final exam.
- A panel of instructors will assess a sample of the essay questions each year using a common rubric.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for SOC 131

SOC132 - Marriage & the Family

Overview

Subject
Sociology

Academic Department
Social Sciences

School
Liberal Arts

Course Description
This course aims to provide an overview of the historical and contemporary contexts that shape our understanding of marriages and families. Topics of discussion include definitions of marriage and family, diverse family structures, gender roles, partner selection, relationship formation, parenting, the intersection of family and work, family violence, divorce, and remarriage. Additionally, the course incorporates valuable insights from cross-cultural and historical comparisons.

Course Pre-requisite(s)
SOC131 Introduction to Sociology

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
10

Academic Level
Undergraduate

General Education Category
Social Sciences

Michigan Transfer Agreement (MTA) Category
Category 4: Social Sciences - Applied Degrees, Category 4: Social Sciences - Transfer Degrees

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
Determined by department

Goals, Topics, and Objectives

Core Course Topics

1. The social construction of ideas about marriage and family. (Learning Objectives 1, 6)
2. The connections between family and other social institutions. (Learning Objective 2)
3. The role of class in marriage and family. (Learning Objectives 3, 6)
4. The role of class in marriage and family. (Learning Objectives 3, 6)
5. Contemporary problems related to marriage and family. (Learning Objectives 3, 6)
6. Theoretical perspectives on marriage and family. (Learning Objective 4)
7. Contemporary marriage and family issues. (Learning Objective 5)

Provide examples of how aspects of family life are socially constructed, varying between cultures, across times, and between individuals.

Explain how family life is influenced by other major social institutions, such as the economy, government, or religion.

Describe ways in which sociological factors, such as class, religion, or race influence personal decisions in dating and marriage.

Describe how sociological theories examine and explain features of family life.

Describe contemporary controversies related to marriage and family.

Analyze how ones own views and values concerning marriage and family are linked to ones background (i.e., gender, race/ethnicity, religion, etc.).

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Each instructor will identify and implement appropriate methods to assess the achievement of the learning objectives for the course.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for SOC 132

SOC151 - Contemporary Social Problems

Overview

Subject
Sociology

Academic Department
Social Sciences

School
Liberal Arts

Course Description
Focuses on understanding current social problems in U.S. society, such as economic, racial, and gender inequality, from a sociological perspective. Because the course relates to social issues, the exact set of problems covered can change from semester-to-semester. Other issues covered in recent semesters include climate change, crime, and social movements intended to solve social problems. The primary goals of this course are increasing student awareness of social problems and their causes, as well as possible solutions.

Course Pre-requisite(s)
SOC131 Introduction to Sociology

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
10

Academic Level
Undergraduate

General Education Category
Social Sciences

Michigan Transfer Agreement (MTA) Category
Category 4: Social Sciences - Applied Degrees, Category 4: Social Sciences - Transfer Degrees

Goals, Topics, and Objectives

Core Course Topics

1. Using the sociological imagination to understand social problems (objectives 1,6)
2. The social construction of social problems (2,6)
3. The role of power in social problems (3)
4. Problems of racial inequality (3,6)
5. Problems of class inequality (3,6)
6. Problems of gender inequality (3,6)
7. Theoretical perspectives on social problems (4)
8. Identification and understanding of specific social problems (5)

Explain the difference between an individual-based approach to studying social problems and a sociological approach.

Provide examples of how social problems are socially constructed, varying between cultures, across time, and between individuals.

Describe how power (especially as power relates to class, race, and gender) plays a role in the U.S.s identification of social problems.

Describe how sociological theories examine and explain contemporary social problems.

Identify and explain several contemporary social problems facing U.S. society.

Analyze how an individuals identification of social problems is linked to their values and to their background (i.e., their class, race, gender, etc.).

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Each instructor will identify and implement appropriate methods to assess the achievement of the learning objectives for the course.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for SOC 151

SOC152 - Women, Men, and Society

Overview

Subject
Sociology

Academic Department
Social Sciences

School
Liberal Arts

Course Description
Women, Men, and Society uses a sociological approach to examine a wide variety of issues related to gender, such as gender roles, gender socialization, and gender inequality. The course looks at how and why experiences of women and men can differ in areas such as employment, politics, and family life. The course also examines issues related to sexual orientation and gender identity.

Course Pre-requisite(s)
Eligible to take ENG courses at HFC.

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
10

Academic Level
Undergraduate

General Education Category
Social Sciences

Michigan Transfer Agreement (MTA) Category
Category 4: Social Sciences - Applied Degrees, Category 4: Social Sciences - Transfer Degrees

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
Determined by department

Goals, Topics, and Objectives

Core Course Topics

1. The Sociological Study of Gender

   a. distinguish between sex and gender b. explain why gender is socially constructed c. recognize how gender intersects with other forms of inequality

2. Gender Socialization

   a. define Sociology's stance in nature-nurture discussion b. describe the impact of the main agents of socialization c. discuss gender differences between different cultures

3. The Gender Gap in Pay

   a. identify the current percentage in the pay gap b. recognize how the pay gap has changed over time c. describe factors behind the gap in pay

4. Institutional Forms of Gender Inequality

   a. describe gender inequality in politics/government b. describe gender inequality in mass media c. describe forms of inequality in other social institutions, such as family

5. Sexual Orientation and Gender Identity

   a. define sexual orientation and gender identity b. recognize examples of homophobia c. discuss types of discrimination against LGBTQ+

The Sociological Study of Gender a. distinguish between sex and gender b. explain why gender is socially constructed c. recognize how gender intersects with other forms of inequality

Gender Socialization a. define Sociologys stance in nature-nurture discussion b. describe the impact of the main agents of socialization c. recognize how gender is a type of social performance

The Gender Gap in Pay a. identify the current percentage in the pay gap b. recognize how the pay gap has changed over time c. describe factors behind the gap in pay

Institutional Forms of Gender Inequality a. describe gender inequality in politics/government b. describe gender inequality in mass media c. describe forms of inequality in other social institutions, such as family

Sexual Orientation and Gender Identity a. define sexual orientation and gender identity b. recognize examples of homophobia c. discuss types of discrimination against LGBTQ+

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Each instructor will identify and implement appropriate methods to assess the achievement of the learning objectives for the course.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for SOC 152

SOC212 - Leadership Diverse Communities Organizat

Overview

Subject
Sociology

Academic Department
Social Sciences

School
Liberal Arts

Course Description
The purpose of Leadership in Diverse Communities and Organizations is to examine and assess the intricacies of traditional leadership praxis and the complexity of leading non-traditional organizations. While the course addresses traditional leadership theories, it also identifies innovative theories and approaches that acknowledge and value the multiplicity of social capital all shareholders bring to an organization. Additionally, the sociological perspective is employed to enable students to critically view their own lived experiences as framework from which to critically assess issues of equity and privilege.

Course Pre-requisite(s)
Eligible to take ENG courses at HFC.

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Academic Level
Undergraduate

General Education Category
Social Sciences

Michigan Transfer Agreement (MTA) Category
Category 4: Social Sciences - Transfer Degrees, Category 4: Social Sciences - Applied Degrees

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
Portfolio of experience and course work

Goals, Topics, and Objectives

Core Course Topics

1. Leadership and Team Building
    - Explain basic principles and practices of leadership.
    - Describe models and theories from non-profit, private and government sectors.
    - Apply principles of leadership, including vision, motivation, and emotional intelligence.
    - Describe competencies of goal setting, risk-taking, ethics, in community change.
    - Integrate personal experience and beliefs with current research and practice.
2. Power and Power Mapping
    - Describe the various types of power.
    - Demonstrate techniques of power analysis.
    - Complete a power map for a specific area or issue.
    - Conduct a classroom demonstration of power mapping.
3. Communication Skills
    - Utilize effective verbal and written communication.
    - Employ public speaking skills in presentations.
    - Display cultural competencies communication styles and methods.
4. Organizational Devleopment and Leadership
    - Assess resource development needs in communities and organizations.
    - Describe fund-making methods.
    - Describe strategic planning methods.
    - Conduct an elementary SWOT analysis
5. Pre-Practicum Research
    - Design a model action campaign.
    - Create outreach materials.
    - Conduct outreach and recruitment.
    - Develop implement strategies.
    - Present model campaign.
6. Career Exploration
    - Conduct research on job opportunities by sector.
    - Develop a resume.
    - Identify practicum priorities.

Explain basic principles and practices of leadership.

Describe models and theories from non-profit, private and government sectors.

Apply principles of leadership, including vision, motivation, and emotional intelligence.

Describe competencies of goal setting, risk-taking, ethics, in community change.

Integrate personal experience and beliefs with current research and practice.

Describe the various types of power.

Demonstrate techniques of power analysis.

Complete a power map for a specific area or issue.

Conduct a classroom demonstration of power mapping.

Utilize effective verbal and written communication.

Employ public speaking skills in presentations.

Display cultural competencies communication styles and methods.

Assess resource development needs in communities and organizations.

Describe fund-making methods.

Describe strategic planning methods.

Conduct an elementary SWOT analysis

Design a model action campaign.

Create outreach materials.

Conduct outreach and recruitment.

Develop implement strategies.

Present model campaign.

Conduct research on job opportunities by sector.

Develop a resume.

Identify practicum priorities.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Reflective journal; research, create and present model leadership campaign; Interview community leader or elected official; quizzes on reading assignments

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for SOC 212

SOC251 - Ethnic & Racial Diversity in Society

Overview

Subject
Sociology

Academic Department
Social Sciences

School
Liberal Arts

Course Description
Introduces students to the sociological study of ethnic and racial groups. Students explore key concepts and issues in connection with definitions of race and ethnicity, immigration, patterns of group inequality and domination, discrimination and prejudice. Focuses on the diversity ofU.S.society and explores the experiences of Native Americans and immigrant groups, including those from Africa, Asia, andEurope. Emphasis on current patterns and consequences of immigration will be studied. Ethnic and racial diversity in other societies will also be explored.

Course Pre-requisite(s)
SOC131 Introduction to Sociology

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
10

Academic Level
Undergraduate

General Education Category
Social Sciences

Michigan Transfer Agreement (MTA) Category
Category 4: Social Sciences - Applied Degrees, Category 4: Social Sciences - Transfer Degrees

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
Determined by department

Goals, Topics, and Objectives

Core Course Topics
1. Understanding Race and Ethnicity (objectives 1,6).
2. The Legacy of Colonialism (objectives 2, 3, 4, 5, 6).
3. Historic and Contemporary Social Movements (objective 2, 4).
4. Historic and Contemporary issues concerning Affirmative Action (objectives 3, 5).
5. Contemporary issues concerning Multi-cultural Education in the United States (objective 4).

Distinguish race from ethnicity.

Identify both contemporary and historical patterns of ethnic and racial inequality in U.S. and globally.

Define and illustrate biological, cultural, and structural explanations as they relate to race and social stratification.

Distinguish the differences and commonalities that exist between racism, prejudice, ethnocentrism, nationalism, and colonialism.

Describe social stratification as it relates to racism in the United States.

Analyze the significance of race and ethnicity in relationship to social mobility in the United States, and identify structural causes of inequality to support the analysis.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Each instructor will identify and implement appropriate methods to assess the achievement of the learning objectives for the course.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for SOC 251

SOC253 - Sociology of Deviance

Overview

Subject
Sociology

Academic Department
Social Sciences

School
Liberal Arts

Course Description
Explores how one becomes deviant, the social construction of deviant behavior, the impact of societal responses to deviance, and processes used to control deviant behavior. Offers a wide range of perspectives and theoretical formulations to explain the onset, persistence, and desistence of deviance. Also discusses both formal and informal responses to deviant behaviors including criminalization and stigmatization, and their cross-cultural variation. Additionally, course examines particular forms of deviance including homicide, domestic violence, mental illness, alcohol and drug abuse, sexual deviance, property and white collar/organized crimes.

Course Pre-requisite(s)
SOC131 Introduction to Sociology

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
15

Academic Level
Undergraduate

General Education Category
Social Sciences

Michigan Transfer Agreement (MTA) Category
Category 4: Social Sciences - Applied Degrees, Category 4: Social Sciences - Transfer Degrees

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
Determined by department

Goals, Topics, and Objectives

Course Goals
This course introduces the sociological approach to understanding deviant behavior. A wide range of perspectives and theoretical formulations will be used to explain the onset, persistence and desistence of deviance.

Core Course Topics
1. Introduction to the Study of Deviant Behavior.
2. Sociological Theories of Deviant Behavior.
3. Violence and Deviant Behavior.
4. Deviance and Interpersonal Relationships.
5. Mental Illness.
6. Alcohol and Drug Abuse.
7. White Collar and Organized Crime.

Define deviant behavior

Explain how social/legal norms are created and violated

Explain the consequences of social/legal norm violation

Describe how deviance is socially constructed

Analyze how power is involved in defining and labeling deviance.

Illustrate stigmatization and the formation of deviant identities

Explain the micro and macro sociological approaches to the study of deviant behavior

Describe sociological theories associated with specific forms of deviant behavior

Describe the theoretical formulations that derive from the conflict and functionalist perspectives

Analyze recent advances in the theoretical foundations of the study of deviance

Explain the types and definitions of homicide, assault and battery

Describe the trends and patterns of homicide in the US

Define domestic violence and explain types, forms and risk factors

Describe the characteristics of victims and offenders

Analyze the cultural, social and medical definitions of rape, sexual assault, and child sexual abuse

Analyze definitions of sexual deviance in theUSand across the globe

Analyze the cultural, social and medical definitions of mental illness

Explain the various forms and prevalence of mental illness

Explain the nature and prevalence of alcohol and drug abuse in theUSand across the globe

Evaluate applicable theories as explanations of alcohol and drug abuse

Explain the nature and definitions of various property crimes such as burglary, robbery and larceny-theft

Describe the prevalence of property crimes in theUSand across the globe

Explain the nature and definitions of white collar crimes

Describe the prevalence of white-collar crimes in the US and across the globe

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
To be determined by the instructor. However, a wide range of assessment including (but not limited to) true and false, multiple choice, matching, short answer, research paper, internet assignments, newspaper searches, article analysis and library projects may be utilized.

Texts
To be determined by instructor.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for SOC 253

SOC254 - Social Psychology

Overview

Subject
Sociology

Academic Department
Social Sciences

School
Liberal Arts

Course Description
Introduces the social forces affecting people's lives and how people affect their group. This course examines three areas of behavior resulting from intentional influence, membership in a group, and social interaction. Self-perception, behavior and attitude, attraction, aggression, altruism and group processes are also explored. This course may be taken for credit in either psychology or sociology but not both.

Course Pre-requisite(s)
PSY131 Introductory Psychology and SOC131 Introduction to Sociology or Instructor Permission

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
10

Academic Level
Undergraduate

General Education Category
Social Sciences

Michigan Transfer Agreement (MTA) Category
Category 4: Social Sciences - Applied Degrees, Category 4: Social Sciences - Transfer Degrees

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
Determined by department

Goals, Topics, and Objectives

Core Course Topics

1. The Self
2. Self-Presentation and Social Perception
3. Social
4. Attitudes
5. Persuasion
6. Prejudice and Discrimination
7. Social Influence
8. Group Behavior
9. Interpersonal Attraction
10. Intimate Relationships
11. Aggression
12. Prosocial Behavior: Helping Others

Explain how the self influences and is influenced by the social environment;

Explain the psychology of the self and the important functions that the self as a construct serves;

Describe the ways in which people interpret, analyze, remember, and use information about the social world;

Comparing multiple perspectives on attitude formation, discuss attitudes and how they develop;

Determine and analyze the effectiveness of a persuasive message;

Explain the social and psychological causes of prejudice and discrimination and describe ways to reduce negative intergroup behavior and evaluations;

Explain the concept of social influence and describe the social and psychological factors that influence conformity, compliance, and obedience;

Discuss the characteristics of group behavior, including leadership and decision making;

Describe interpersonal attraction and explain the concepts of affiliation needs;

Define and explain the concept of aggression from both social and psychological viewpoints.

Analyze the helping process or prosocial behavior by answering some basic questions: Why do we help others? When do we help others? Who among us is most likely to help? Who are we likely to help?

Analyze a current social issue by applying the concepts and theories learned in social psychology.*

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Each instructor will identify and implement appropriate methods to assess the achievement of the learning objectives for the course.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for SOC 254

SPC131 - Intro to Public Speaking

Overview

Subject
Speech

Academic Department
Media Communication Arts

School
Liberal Arts

Course Description
This course explores how to develop public speaking skills through practice in preparing and delivering speeches for various audiences and situations.

Course Pre-requisite(s)
Eligible to take ENG131 Introduction College Writing at HFC.

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
10

Academic Level
Undergraduate

General Education Category
English Composition or Communications, Humanities and Fine Arts

Michigan Transfer Agreement (MTA) Category
Category 2: English Composition or Communications - Transfer Degrees, Category 2: English Composition or Communications - Applied Degrees, Category 5: Humanities and Fine Arts - Applied Degrees, Category 5: Humanities and Fine Arts - Transfer Degrees

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
Other

Goals, Topics, and Objectives

Course Goals
The goal of this course is to develop and improve effective public speaking skills in social, professional, and public situations.

Core Course Topics
1. Basic communication concepts, models, and terms
2. Types of listening and development of listening skills and self-awareness of listening behaviors
3. Public speaking apprehension and methods/techniques to deal with speech anxiety and confidence building
4. Extemporaneous speaking
5. The importance of preparation and various rehearsal techniques
6. Audience analysis and appreciation of diversity
7. Speech topic and purpose selection
8. Speech outlines
9. Types of supporting material, including selection, evaluation, and effective use
10. Speech organizational patterns
11. Presentation aids - types, design, preparation, and use
12. Speech delivery methods, modes, and techniques (voice, face, gestures, and movement)
13. Ethics of public speaking and listening
14. Research skills
15. Speaking using new media technologies

Understand and describe basic communication concepts, models, and terminology

Analyze listening expectations and responses through active listening and nonverbal feedback, identifying main ideas, supporting details, and distinguishing between logical and emotional arguments

Develop poise and gain confidence when speaking in various settings

Gain awareness of personal speech habits and characteristics

Successfully recognize, analyze, and adapt to diverse audience expectations and responses

Distinguish between effective and ineffective topic selection

Logically and effectively organize main points of a topic to thoughtfully compose and critically evaluate written and spoken messages

Identify, gather, evaluate, and use appropriate supporting material for speeches

Analyze and critique various speech techniques, organizational patterns, content, and purpose

Design, prepare, and effectively use presentation aids

Exercise proper delivery methods and techniques, including voice modulation, gestures, facial expressions, and movement

Analyze the ethics of public speaking and listening, and the impact it can have on others

Develop speaking notes and proper bibliographies through effective research techniques

Develop confidence in delivering speeches in various digital public speaking formats, both synchronously and asynchronously

Establish critical thinking skills to identify misinformation and assess credibility during online research or when utilizing generative AI for speech writing and organization

Evaluate speaker credibility by detecting bias, prejudice, and ethnocentrism, and observing consistency between verbal and nonverbal messages

Establish proficiency in the key components of effective public speaking: timing, adequate practice, clear deliverables, and meeting deadlines

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
• Speaking Projects: Four formal academically researched speeches: One Introductory, One Informative, One Persuasive, One Special Occasion, and including extemporaneous speaking, with speech outlines as applicable • Additional informal speeches/activities • Speech evaluation/self-analysis • Audience and peer evaluation/analysis • Tests/Quizzes/Exams: Graded activities and/or quizzes, and final examination/project (written and/or oral)

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for SPC 131

SPC145 - Interpersonal Communication

Overview

Subject
Speech

Academic Department
Media Communication Arts

School
Liberal Arts

Course Description
This course explores the process of communication between individuals in formal and informal, face-to-face and digital settings across family, social, and work groups. Examines the social, linguistic, cultural, and psychological factors impacting interpersonal communication.

Course Pre-requisite(s)
Eligible to take ENG131 Introduction College Writing at HFC.

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
10

Academic Level
Undergraduate

General Education Category
English Composition or Communications

Michigan Transfer Agreement (MTA) Category
Category 2: English Composition or Communications - Transfer Degrees, Category 2: English Composition or Communications - Applied Degrees

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
Other

Goals, Topics, and Objectives

Course Goals
The goal of this course is to help students understand the concepts, principles, and theories essential to improving interpersonal oral and written communication skills.

Core Course Topics
1. The nature of the communication process
2. The influence of communicative behaviors on personal relationships, groups, and society
3. Self-concept: awareness, acceptance, actualization, and self-disclosure
4. Perception: perceiver and perceived
5. Active listening and feedback
6. Language and the symbolic process in oral and written communication
7. Nonverbal communication
8. Interpersonal relationships: intimate, family, social, and work groups, and the concepts of intimacy and distance in relationships
9. Communication climates and overcoming barriers
10. Ethical communication and conflict management
11. Social media communication and technology (digital communication)
12. Cultural awareness

Understand and describe the communication process including basic communication concepts, terms and models

Demonstrate interpersonal skills in areas of listening, ethics, in verbal and nonverbal communication, among others within personal and professional relationships

Recognize the elements of interpersonal communication situations, including forms and functions of non-verbal behavior

Find and evaluate research material in terms of credibility, bias, accuracy, and ethics

Describe the origin of the self-concept: awareness, acceptance, actualization, and self-disclosure, and its effect on communication

Identify errors in the perception process and its effect on communication

Demonstrate active listening skills

Use empathy and perception-checking skills to prevent misunderstanding in interpersonal relationships

Understand and assess the competencies related to communicating with those from other diverse cultural contexts

Assess and articulate the values, beliefs and attitudes in communication situations, including the ethical dimensions of situations

Analyze self-disclosure in relationships

Demonstrate conflict resolution skills and problem-solving methods

Understand how the use of technology changes the way we create, maintain, and dissolve interpersonal relationships

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
• Quizzes and/or written exams • Summary and analysis of case studies • In-class reflective papers on interpersonal communication topics • Class presentations, individual or group • Major collaborative research-based oral and written project • Research paper or project

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for SPC 145

SPN130 - Introduction to Hispanic Cultures

Overview

Subject
Language Studies

Academic Department
Language Studies

School
Liberal Arts

Course Description
Introduces Hispanic cultures throughout the globe, focusing on their histories, traditions, values, and characteristics. Also provides a survey of mainstream and minority Hispanic experiences as documented through art, literature, music, and film. Conducted in English. Does not fulfill program requirements for a language course.

Course Pre-requisite(s)
ENG094 ALP: Reading and Writing/ENG095E ALP for ELL:Reading & Writing eligible or instructor permission

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
10

Academic Level
Undergraduate

General Education Category
Social Sciences

Michigan Transfer Agreement (MTA) Category
Category 4: Social Sciences - Applied Degrees

Goals, Topics, and Objectives

Course Goals
SPN130 Intro to Hispanic CulturesS is designed to increase students' knowledge of a variety of Hispanic cultures, including minority and underrepresented communities, and their roles within global society.

Core Course Topics
1. Geography of the Spanish-speaking world
2. History of the Spanish-speaking world
3. Contemporary issues of Hispanic communities
4. Diversity within the Spanish-speaking world
5. Contributions of Spanish speakers
6. Critical analysis of Hispanic Culture artifacts

Identify a variety of Spanish-speaking countries and their main characteristics

Explain the causes and effects of significant historical events in the Spanish-speaking world

Demonstrate knowledge of the contemporary issues that impact Spanish-speaking populations and communities

Describe the richness and diversity of worldwide Hispanic communities, giving specific examples to illustrate cultural, ethnic, and linguistic differences

Identify significant contributions of Spanish speakers to global society

Synthesize multiple sources of information on a topic to form an argument

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of academic achievement will be identified and implemented by the class instructor. Methods will include, but not be limited to:

- Participation
- Weekly/regular quizzes
- Homework assignments
- Chapter/unit tests
- Written papers, oral presentations, and/or projects
- Midterm/final exam

General Course Requirements and Recommendations
Note: A grade of C- is not transferable and is not accepted by some programs at HFC.

Texts
All sections of this level will use a textbook (and any accompanying materials) selected by the course coordinator and approved by the World Languages Committee.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for SPN 130

SPN131 - Elementary Spanish I

Overview

Subject
Language Studies

Academic Department
Language Studies

School
Liberal Arts

Course Description
Introduces the basic skills of reading, writing, speaking, and listening in Spanish within communicative contexts. Covers the elementary pronunciation and grammatical principles necessary for comprehending and expressing simple ideas in both spoken and written Spanish. Also presents Hispanic culture. Note: A "C-" grade is not transferrable and is not accepted by some programs at HFC.

Course Pre-requisite(s)
ENG094 ALP: Reading and Writing/ENG095E ALP for ELL:Reading & Writing eligible or instructor permission

Credit Hours
4

Total Contact Hours
Total Instructor Contact Hours:
62

Total Student Contact Hours:
62

Course Fee
10

Academic Level
Undergraduate

General Education Category
Humanities and Fine Arts

Michigan Transfer Agreement (MTA) Category
Category 5: Humanities and Fine Arts - Applied Degrees, Category 5: Humanities and Fine Arts - Transfer Degrees

Goals, Topics, and Objectives

Course Goals
SPN131 Elementary Spanish I is designed to enable students to reach the Novice Mid level on the American Council on the Teaching of Foreign Languages (ACTFL) proficiency scale, focusing on language learning through communication, cultures, connections, comparisons, and communities.

Core Course Topics
1. Greetings, introductions, and farewells
2. Phonetics
3. Alphabet
4. Numbers
5. Present-tense verbs
6. Future
7. Gender and number agreement
8. Affirmation and negation
9. Interrogatives
10. Vocabulary
11. Hispanic culture

Use appropriate greetings, introductions, and farewells.
Demonstrate knowledge of phonetics through the comprehensible pronunciation of Spanish words.
Demonstrate verbal and written knowledge of the Spanish alphabet.
Recognize and produce numbers, dates, and times.
Demonstrate correct usage of present-tense indicative verb forms, including regulars, irregulars, some common reflexives, ser and estar, and gustar.
Express the future both orally and in writing using the ir + a + infinitive structure.
Demonstrate knowledge of gender and number agreement of nouns, articles, descriptive and unstressed possessive adjectives, and subject and direct object pronouns.
Create simple affirmative and negative statements using appropriate word order.
Develop and respond to interrogative questions relating to chapter/unit themes using appropriate word order.
Write about, speak about, and interpret situations similar to those presented in each chapter/unit of the textbook.
Compare and contrast elements of Spanish culture that differ from the U.S. norm.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of academic achievement will be identified and implemented by the class instructor. Methods will include, but not be limited to:

- Participation
- Weekly/regular quizzes
- Homework assignments
- Chapter/unit tests
- Oral/receptive-expressive exam(s)
- Departmental writing assessment
- Midterm/final exam

Texts
All sections of this level will use a textbook (and any accompanying materials) selected by the course coordinator and approved by the World Languages Committee.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for SPN 131

SPN132 - Elementary Spanish II

Overview

Subject
Language Studies

Academic Department
Language Studies

School
Liberal Arts

Course Description
Further builds reading, writing, speaking, and listening skills in Spanish, focusing on communication in a cultural context. Develops students' knowledge of vocabulary, pronunciation and grammatical principles in order to comprehend and express everyday ideas in both spoken and written Spanish. Presents Hispanic culture.

Course Pre-requisite(s)
A grade of C or better in SPN131 Elementary Spanish I or in one year of high school Spanish, or instructor permission

Credit Hours
4

Total Contact Hours
Total Instructor Contact Hours:
62

Total Student Contact Hours:
62

Course Fee
10

Academic Level
Undergraduate

General Education Category
Humanities and Fine Arts

Michigan Transfer Agreement (MTA) Category
Category 5: Humanities and Fine Arts - Applied Degrees, Category 5: Humanities and Fine Arts - Transfer Degrees

Goals, Topics, and Objectives

Course Goals
SPN132 Elementary Spanish II is designed to enable students to reach the Novice High level on the American Council on the Teaching of Foreign Languages (ACTFL) proficiency scale, focusing on language learning through communication, cultures, connections, comparisons, and communities.

Core Course Topics
1. Present-tense verbs
2. Past-tense verbs
3. Future
4. Commands
5. Passive voice
6. Gender and number agreement
7. Pronouns
8. Comparative and superlative structures
9. Conjunctions
10. Narration
11. Hispanic culture

Demonstrate correct usage of present-tense indicative stem-changing and irregular reflexive verbs, saber and conocer, and verbs of preference similar to gustar.

Recognize and produce preterit and imperfect verb forms, including regulars, irregulars, and reflexives.

Recognize and produce simple future verb forms, including irregulars.

Recognize and produce simple formal and informal commands.

Recognize and produce the passive voice with se.

Demonstrate correct usage of demonstrative adjectives with appropriate gender and number agreement.

Interpret and demonstrate correct usage of direct and indirect object pronouns.

Compare and contrast using appropriate comparative and superlative structures.

Interpret and demonstrate correct usage of coordinating and some common subordinating conjunctions such as cuando and mientras.

Interpret and produce simple narratives in the past using appropriate time markers and present, preterit, and imperfect verb forms.

Analyze aspects of Hispanic culture that differ from the U.S. norm, giving specific examples that illustrate such differences.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of academic achievement will be identified and implemented by the class instructor. Methods will include, but not be limited to:

- Participation
- Weekly/regular quizzes
- Homework assignments
- Chapter/unit tests
- Oral and/or expressive-receptive exam(s)
- Midterm/final exam

Texts
All sections of this level will use a textbook (and any accompanying materials) selected by the course coordinator and approved by the World Languages Committee.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for SPN 132

SPN141 - Elementary Spanish Conversation

Overview

Subject
Language Studies

Academic Department
Language Studies

School
Liberal Arts

Course Description
Focuses on expanding students' ability to understand and speak in Spanish. Emphasizes everyday topics of conversation, including current events. Is transferable but not a substitute for a basic language requirement. May be taken concurrently with Spanish 132, 231 or 232.

Course Pre-requisite(s)
A grade of C or better in SPN131 Elementary Spanish I or in one year of high school Spanish, or instructor permission

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
15

Academic Level
Undergraduate

General Education Category
Humanities and Fine Arts

Goals, Topics, and Objectives

Course Goals
SPN141 Elementary Spanish Conversatio is designed to strengthen students' ability to communicate in conversational Spanish and to broaden their familiarity with the peoples and cultures of Spanish-speaking countries.

Core Course Topics
1. Phonetics
2. Vocabulary and idioms
3. Register
4. Listening comprehension
5. Grammatical structures
6. Culture

Demonstrate knowledge of phonetics through comprehensible pronunciation with an emphasis on accent and intonation

Employ increasing vocabulary and idiom knowledge in thematic conversations (such as self, daily life, family, etc.)

Distinguish between formal and informal varieties of Spanish

Apply a variety of listening comprehension strategies to interpret spoken Spanish

Develop and use grammatical structures (such as pronouns, subject-verb agreement, verb tense, interrogatives, etc.) that support conversational goals

Develop an awareness of how linguistic and cultural differences are reflected in varieties of spoken Spanish

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of academic achievement will be identified and implemented by the class instructor. Methods will include, but not be limited to:

- Participation
- Homework assignments
- Oral presentation(s)/exam(s)
- Midterm/final exam

Texts
All sections of this level will use a textbook (and any accompanying materials) selected by the course coordinator and approved by the World Languages Committee.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for SPN 141

SPN231 - Intermediate Spanish I

Overview

Subject
Language Studies

Academic Department
Language Studies

School
Liberal Arts

Course Description
Follows SPN-132 and is the first of two intermediate-level Spanish courses focusing on communication in a cultural context. Develops students' reading, writing, speaking, and listening skills in Spanish, expands their vocabulary, and deepens their knowledge of pronunciation and grammatical principles in order to comprehend and express essential ideas in both spoken and written Spanish. Presents Hispanic culture.

Course Pre-requisite(s)
A grade of C or better in SPN132 Elementary Spanish II or in two years of high school Spanish, or instructor permission

Credit Hours
4

Total Contact Hours
Total Instructor Contact Hours:
62

Total Student Contact Hours:
62

Course Fee
10

Academic Level
Undergraduate

General Education Category
Humanities and Fine Arts

Michigan Transfer Agreement (MTA) Category
Category 5: Humanities and Fine Arts - Transfer Degrees, Category 5: Humanities and Fine Arts - Applied Degrees

Goals, Topics, and Objectives

Course Goals
SPN231 Intermediate Spanish I is designed to enable students to reach the Intermediate Low level on the American Council on the Teaching of Foreign Languages (ACTFL) proficiency scale, focusing on language learning through communication, cultures, connections, comparisons, and communities.

Core Course Topics
1. Subjunctive verbs
2. Hypothetical expressions
3. Reciprocity
4. Perfect verb forms
5. Commands
6. Gender and number agreement
7. Prepositions
8. Affirmation and negation
9. Conjunctions
10. Essay composition
11. Critical listening, speaking, and writing
12. Critical reading
13. Hispanic culture

Recognize and produce both present and imperfect subjunctive forms, including regulars and irregulars, with appropriate independent verb clauses.

Recognize and produce hypotheses using conditional verb forms appropriately, including regulars and irregulars.

Express reciprocity correctly both orally and in writing.

Demonstrate correct usage of both present and past perfect verb forms, including regular and irregular participles.

Recognize and produce formal and informal commands, including regulars, irregulars and those with reflexive and direct and indirect object pronouns

Demonstrate correct usage of stressed possessive adjectives and possessive pronouns with appropriate gender and number agreement

Recognize and produce sentences using por and para appropriately

Demonstrate correct usage of indefinite and negative expressions in affirmative and negative statements and questions

Demonstrate correct usage of indicative and subjunctive verb modes in dependent clauses introduced by adverbial and adjectival conjunctions

Write simple descriptive, narrative, and informative essays related to themes presented in each chapter/unit of the textbook using appropriate register

Interpret short authentic audio and visual materials and respond critically in Spanish

Summarize Spanish-language materials in written compositions and oral presentations

Analyze cultural differences as manifested through language differences

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of academic achievement will be identified and implemented by the class instructor. Methods will include, but not be limited to:

- Participation
- Homework assignments
- Weekly/regular quizzes
- Weekly/regular compositions
- Chapter/unit tests
- Oral presentation(s)/project(s)
- Midterm/final exam

Texts
All sections of this level will use a textbook (and any accompanying materials) selected by the course coordinator and approved by the World Languages Committee.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for SPN 231

SPN232 - Intermediate Spanish II

Overview

Subject
Language Studies

Academic Department
Language Studies

School
Liberal Arts

Course Description
Follows SPN-231 and is the second of two intermediate-level Spanish courses focusing on communication in a cultural context. Further develops students' reading, writing, speaking, and listening skills in Spanish, expands their vocabulary, and deepens their knowledge of pronunciation and grammatical principles in order to comprehend and express a wide range of ideas in both spoken and written Spanish. Presents Hispanic culture.

Course Pre-requisite(s)
A grade of C or better in SPN231 Intermediate Spanish I or in three years of high school Spanish, or instructor permission

Credit Hours
4

Total Contact Hours
Total Instructor Contact Hours:
62

Total Student Contact Hours:
62

Course Fee
10

Academic Level
Undergraduate

General Education Category
Humanities and Fine Arts

Michigan Transfer Agreement (MTA) Category
Category 5: Humanities and Fine Arts - Applied Degrees, Category 5: Humanities and Fine Arts - Transfer Degrees

Goals, Topics, and Objectives

Course Goals
SPN232 Intermediate Spanish II is designed to enable students to reach the Intermediate Mid level on the American Council on the Teaching of Foreign Languages (ACTFL) proficiency scale, focusing on language learning through communication, cultures, connections, comparisons, and communities.

Core Course Topics
1. Present-tense verbs
2. Past-tense verbs
3. Subjunctive verbs
4. Hypothetical expressions
5. Perfect verb forms
6. Future
7. Commands
8. Passive voice
9. Gender and number agreement
10. Prepositions
11. Critical listening, speaking, and writing
12. Critical reading
13. Hispanic culture

Differentiate among the verbs ser, estar, and haber and correctly use them orally and in writing

Interpret and produce personal and historical narratives in the past using the preterit and imperfect verb tenses and time markers appropriately

Use a variety of verbs in the present and imperfect subjunctive tenses in noun, adjective, and adverbial clauses

Express hypotheses using the conditional and imperfect subjunctive tenses with si clauses correctly in speech and writing

Employ the present perfect future, present perfect subjunctive, past perfect subjunctive, and conditional perfect verb tenses correctly in speech and writing, including regular and irregular participles

Use the simple future tense to express probability and conjecture in the present

Produce indirect and nosotros commands in speech and writing, including regulars, irregulars and those with reflexive and direct and indirect object pronouns

Express indefinite and unplanned occurrences using se

Demonstrate correct usage of past participles as adjectives with appropriate gender and number agreement

Use verbs that require a preposition, such as a, con, de, en, and por correctly in variety of verb tenses

Interpret authentic audio and visual materials and respond critically in Spanish

Summarize Spanish-language research in written compositions and oral presentations

Analyze cultural differences as manifested through language differences

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of academic achievement will be identified and implemented by the class instructor. Methods will include, but not be limited to:

- Participation
- Homework assignments
- Weekly/regular quizzes
- Weekly/regular compositions
- Chapter/unit tests
- Oral presentation(s)/project(s)
- Midterm/final exam

Texts
All sections of this level will use a textbook (and any accompanying materials) selected by the course coordinator and approved by the World Languages Committee.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for SPN 232

SPN290 - StudyAbroad Spanish Lang&Hispan Culture

Overview

Subject
Language Studies

Academic Department
Language Studies

School
Liberal Arts

Course Description
Develops students' knowledge of the Spanish language and Hispanic culture in a Spanish-speaking country under the direction of a World Languages faculty member. Includes language and cultural lessons prior to departure and a researched reflection on a particular theme of interest presented upon students' return. Specific travel information announced at least one semester prior to departure.

Course Pre-requisite(s)
A grade of C or better in SPN131 Elementary Spanish I, SPN132 Elementary Spanish II, SPN231 Intermediate Spanish I, or SPN232 Intermediate Spanish II or equivalent, or instructor permission

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
2500

Academic Level
Undergraduate

General Education Category
Humanities and Fine Arts

Goals, Topics, and Objectives

Course Goals
SPN290 Study Abroad Spanish Lang Cult is designed to provide opportunities for language practice in speaking, listening, reading, and writing Spanish. As a Study Abroad course, this course promotes the knowledge of a Spanish-speaking country and its people and helps students understand how language and culture connect. This course also encourages academic responsibility, critical thinking, and an understanding of research methods, the results of which will be presented as a researched essay, report, or other creative project.

Core Course Topics
1. Phonetics
2. Vocabulary and idioms
3. Listening comprehension
4. Grammatical structures
5. Research and critical analysis
6. Culture

Demonstrate knowledge of phonetics through the comprehensible pronunciation of Spanish as spoken in the destination country.

Interpret and correctly apply vocabulary and idioms of the country and region of travel.

Interpret and respond appropriately to conversational themes with an emphasis on varieties and accents of the country and region of travel.

Develop and use grammatical structures that support informal and academic discourse.

Synthesize and analyze information on particular issues relating to the Spanish language and Hispanic literatures and cultures from primary and secondary sources.

Compare and contrast stereotypes of and experiences with the Spanish language and Hispanic cultures with U.S. stereotypes and experiences.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of academic achievement will be identified and implemented by the class instructor. Methods will include, but are not limited to:

- Participation in lessons and activities prior to travel, during travel, and upon return
- Frequent consultations with the instructor
- Periodic written summary of work performed/reflective portfolio
- Final project and presentation

General Course Requirements and Recommendations
1. Prior to leaving the United States, the students and instructor will choose a mutual area of interest such as one aspect of basic language, literature, culture, etc.
2. The instructor will then assist the students in identifying resources for investigation (books, web sites, journal articles, places to visit, people to interview, etc.), at least some of which will be in Spanish.
3. The students will conduct pre-travel research on their own.
4. The students and instructor will travel to a Spanish-speaking country and put into practice their newly acquired linguistic and cultural knowledge.
5. While in a Spanish-speaking country, the students, aided by the instructor, will do further research on their selected topic.
6. Upon returning to the United States, the students will present a paper, report, or project along with a bibliography by the end of the semester.

Texts
All sections of this level will use a textbook and/or accompanying materials selected by the course coordinator and approved by the World Languages Committee.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for SPN 290

SRG101 - Introduction to Surgical Technology

Overview

Subject
Surgical Technician

Academic Department
Health, Education, and Human Services

School
Health & Human Services

Course Description
The course introduces the fundamentals of operating room techniques, emphasizing principles and practices of asepsis and sterilization. Physical and psychosocial aspects of the patient are explored. Included are the roles and responsibilities of the surgical technologist and other surgical team members; accountability and legal aspects; identification of common equipment, instruments, and supplies; students practice scrubbing, gowning, and gloving. Selected laboratory practice required.

Course Pre-requisite(s)
Acceptance into the Surgical Technologist program, BIO135 Microbiology for AHS, and BIO233 Anatomy and Physiology I both with a C grade or higher.

Course Co-requisite(s)
SRG105 Intro to Surgical Tech Lab

Credit Hours
4

Total Contact Hours
Total Instructor Contact Hours:
62

Total Student Contact Hours:
62

Course Fee
25

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics
1. Communication Skills and Teamwork
2. Legal Issues, Documentation, and Risk Management
3. Healthcare Facility Organization and Management
4. Physical Environment
5. Methods of Disinfection and Sterilization
6. Environmental Disinfection of the Operating Room
7. Hemostasis, Suture, and Wound Healing
8. Biopsychosocial Needs of the Patient
9. Patient Transport and Surgical Positioning
10. Urinary Catheterization
11. Surgical Counts
12. Basic Instrumentation
13. Environmental Hazards
14. Aseptic Technique

Describe the surgical technologist, nature of their work, employment options, and possible career opportunities.

Describe hospital organization, noting the relationship of the surgical area to the other departments of the hospital.

Compare and contrast the surgical team members, noting the moral, professional, and legal responsibility of each.

Identify the surgical patient's needs before, during, and after surgery.

Explain the principles and practices of surgical asepsis.

Describe sutures and suturing techniques used in surgical procedures.

Categorize basic surgical instruments and instrument categories, common supplies, and equipment and their uses.

Describe and demonstrate scrubbing, gowning, and gloving for surgical procedures.

Demonstrate basic surgical positioning and urinary catheterization.

Analyze basic surgical positioning factors including anesthesia, surgeon's preference, patient considerations, and safety.

Describe common forms of sterilization used for surgical instruments and supplies.

Describe the types of wounds, wound healing, infection, and blood replacement.

Differentiate among various methods of hemostasis.

Describe objectives and priorities in emergency situations.

Demonstrate the principles of safe transport of the patient to the OR, including transfer on and off the OR table.

Describe legal issues, documentation and Risk Management as they pertain to the operating room (OR) setting.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of academic achievement will include unit exams, quizzes, and a cumulative final.

General Course Requirements and Recommendations
Students must pass this course with a "C" or better grade to remain in the Surgical Technologist AAS Degree Program.

Students must follow all classroom/ clinical policies described in the most current Surgical Technologist AAS Degree Student Handbook.

Grading Scale
Student grades will be assigned using the following scale:

- 99-100% = A+
- 94-98% = A
- 90-93% = A-
- 87-89% = B+
- 83-86% = B
- 80-82% = B-
- 76-79% = C+
- 70-75% = C
- 65-69% = D+
- 60-64% = D
- 60% and below = E

Texts
Required: Textbook(s) as determined by program faculty. Recommended: Textbook(s) as determined by program faculty.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for SRG 101

SRG102 - Surgical Technology Introduction

Overview

Subject
Surgical Technician

Academic Department
Health, Education, and Human Services

School
Health & Human Services

Course Description
The course introduces the fundamentals of surgical technology. Physical and psychosocial aspects of the patient are explored. Included are the roles and responsibilities of the surgical technologist and other surgical team members, accountability and legal aspects, healthcare facility organization, the physical environment of the operating room, safety standards, emergency situations and All Hazard preparations.

Credit Hours
2

Total Contact Hours
Total Instructor Contact Hours:
32

Total Student Contact Hours:
32

Course Fee
25

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Communication Skills and Teamwork
2. Professional organizations
3. Legal Issues, Documentation, and Risk Management
4. Healthcare Facility Organization and Management
5. Physical Environment and Hazards
6. Biopsychosocial Needs of the Patient
7. Technology of the Operating Room
8. Protected Health Information
9. Microbiology review and Preventing Disease Transmission

Describe the surgical technologist, nature of their work, employment options, and possible career opportunities.

Identify surgical technology professional organizations.

Analyze the components of effective teamwork and communication.

Describe hospital organization, noting the relationship of the surgical area to the other departments of the hospital.

Compare and contrast the surgical team members, noting the moral, professional, and legal responsibility of each.

Describe objectives and priorities in emergency situations.

Describe legal issues, documentation and Risk Management as they pertain to the operating room (OR) setting

Analyze the critical elements related to the development of surgical conscience.

Distinguish and assess cultural and religious influences of the surgical patient.

Discuss the procedure for a patient death in the operating room (OR).

Evaluate the unique physical and psychological needs of each vulnerable patient population.

Analyze the role of the surgical technologist in the protection of self, patients, and others from hazards in the operative environment.

Recognize OR design types and working environment.

Discuss best practices for utilizing electronic medical records (EMR) and protected health information (PHI).

Describe the role of advanced technology in patient care.

Compare and contrast the structure and characteristics of different microorganisms.

Relate the infectious process to surgical practice.

Recognize developing emergency situations, initiate appropriate action, and assist in the treatment of the patient.

Discuss the various roles the CST can fulfill during an all-hazards event.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of academic achievement will include unit exams, quizzes, and a cumulative final.

General Course Requirements and Recommendations
Students must pass this course with a "B-" or better grade to remain in the Surgical Technologist AAS Degree Program.

Students must follow all classroom/ clinical policies described in the most current Surgical Technologist AAS Degree Student Handbook.

Grading Scale
Student grades will be assigned using the following scale:

- 99-100% = A+
- 94-98% = A
- 90-93% = A-
- 87-89% = B+
- 83-86% = B
- 80-82% = B-
- 76-79% = C+
- 70-75% = C
- 65-69% = D+
- 60-64% = D
- 60% and below = E

Texts
Required: Textbook(s) as determined by program faculty.Recommended: Textbook(s) as determined by program faculty.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for SRG 102

SRG104 - Fundamentals of Surgical Technology

Overview

Subject
Surgical Technician

Academic Department
Health, Education, and Human Services

School
Health & Human Services

Course Description
The course introduces the fundamentals of operating room techniques, emphasizing principles and practices of asepsis and sterilization. Physical and psychosocial aspects of the patient are explored. Included are the roles and responsibilities of the surgical technologist and other surgical team members; identification of common equipment, instruments, and supplies; the perioperative phases and environment; students practice scrubbing, gowning, and gloving, and preparation of the sterile surgical fields.

Course Pre-requisite(s)
Acceptance into the Surgical Technology program, SRG102 Surgical Technology Intro with a B- or higher, AH100 Medical Terminology, BIO233 Anatomy and Physiology I, BIO135 Microbiology for AHS or BIO251 Microbiology, all with a C or higher.

Course Co-requisite(s)
SRG106 Fund. of Surgical Tech Lab

Credit Hours
2

Total Contact Hours
Total Instructor Contact Hours:
32

Total Student Contact Hours:
32

Course Fee
25

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Physical Environment
2. Methods of Disinfection and Sterilization
3. Environmental Disinfection of the Operating Room
4. Hemostasis, Suture, and Wound Healing
5. Biopsychosocial Needs of the Patient
6. Patient Transport and Surgical Positioning
7. Urinary Catheterization
8. Surgical Counts
9. Basic Instrumentation
10. Environmental Hazards
11. Aseptic Technique
12. Perioperative techniques and environment.

Identify the surgical patient's needs before, during, and after surgery.

Compare and contrast sterile techniques and practices related to the principles of asepsis.

Identify the principles and procedures related to disinfection and sterilization.

Describe sutures and suturing techniques used in surgical procedures.

Categorize basic surgical instruments and instrument categories, common supplies, and equipment and their uses.

Differentiate the types of special equipment utilized in the OR.

Demonstrate proper care, handling, and assembly of accessory equipment.

Describe and demonstrate scrubbing, gowning, and gloving for surgical procedures.

Demonstrate basic surgical positioning and urinary catheterization.

Analyze basic surgical positioning factors including anesthesia, surgeon's preference, patient considerations, and safety.

Describe common forms of sterilization used for surgical instruments and supplies.

Describe the types of wounds, wound healing, infection, and blood replacement.

Differentiate among various methods of hemostasis.

Describe objectives and priorities in emergency situations.

Demonstrate the principles of safe transport of the patient to the OR, including transfer on and off the OR table.

Verify the preoperative routines that must be completed.

Explain the concepts for maintaining the sterile field.

Explain in detail the procedure for counting instruments, sponges, and sharps.

Summarize the steps of the postoperative routines.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of academic achievement will include unit exams, quizzes, and a cumulative final.

General Course Requirements and Recommendations
Students must pass this course with a "B-" or better grade to remain in the Surgical Technologist AAS Degree Program.

Students must follow all classroom/ clinical policies described in the most current Surgical Technologist AAS Degree Student Handbook.

Grading Scale
Student grades will be assigned using the following scale:

- 99-100% = A+
- 94-98% = A
- 90-93% = A-
- 87-89% = B+
- 83-86% = B
- 80-82% = B-
- 76-79% = C+
- 70-75% = C
- 65-69% = D+
- 60-64% = D
- 60% and below = E

Texts
Required: Textbook(s) as determined by program faculty.

Recommended: Textbook(s) as determined by program faculty.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for SRG 104

SRG105 - Introduction to Surgical Technology Lab

Overview

Subject
Surgical Technician

Academic Department
Health, Education, and Human Services

School
Health & Human Services

Course Description
The course introduces the fundamentals of operating room techniques, emphasizing principles and practices of asepsis and sterilization. Physical and psychosocial aspects of the patient are considered throughout the various procedures in the operating process. Included are the roles and responsibilities of the surgical technologist and other surgical team members; identification and handling of common equipment, instruments, and supplies; students are introduced to and practice the sterile and unsterile rules in the operating room. This is a laboratory course.

Course Pre-requisite(s)
Acceptance into the Surgical Technologist AAS Degree program, BIO135 Microbiology for AHS, and BIO233 Anatomy and Physiology I both with a C grade or higher.

Course Co-requisite(s)
SRG101 Intro Surgical Technology

Credit Hours
1

Total Contact Hours
Total Instructor Contact Hours:
16

Total Student Contact Hours:
16

Course Fee
135

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Communication Skills and Teamwork
2. Physical Environment
3. Methods of Disinfection and Sterilization
4. Environmental Disinfection of the Operating Room
5. Hemostasis, Suture, and Wound Healing
6. Biopsychosocial Needs of the Patient
7. Patient Transport and Surgical Positioning
8. Urinary Catheterization
9. Surgical Counts
10. Basic Instrumentation
11. Aseptic Technique
12. Environmental Hazards

Demonstrate the roles of surgical team members, noting the moral, professional, and legal responsibility of each.

Identify the surgical patient's needs before, during, and after surgery.

Assess the patient's vital signs, before, during, and after surgery.

Demonstrate the principles and practices of surgical asepsis.

Identify sutures and suturing techniques that are commonly used in surgical procedures.

Identify basic surgical instruments and instrument categories, common supplies, and equipment and their uses.

Demonstrate basic hand hygiene.

Demonstrate scrubbing, gowning, and gloving for surgical procedures.

Demonstrate basic surgical prepping, positioning, and draping.

Demonstrate proper urinary catheterization techniques.

Modify surgical prepping, positioning, and draping based on factors including anesthesia, surgeon's preference, patient considerations, and safety.

Demonstrate safety throughout the patient surgical experience.

Demonstrate preparation for common forms of sterilization used for surgical instruments and supplies.

Describe common decontamination processes.

Describe objectives and priorities in emergency situations.

Assessment, Requirements, and Outcomes

- Demonstrate the principles of safe transport of the patient to the OR, including transfer on and off the OR table.

Assessment of Academic Achievement
Assessment of academic achievement will include quizzes and competencies.

General Course Requirements and Recommendations
Students must pass this course with a "C" or better grade to remain in the Surgical Technologist AAS Degree Program.

Students must follow all classroom/ clinical policies described in the most current Surgical Technologist AAS Degree Student Handbook.

Students are required to wear the navy blue HFC program scrubs during all lab classes.

Grading Scale
Student grades will be assigned using the following scale:

- 97-100% = A
- 93-96% = A-
- 90-92% = B+
- 87-89% = B
- 84-86% = B-
- 80-83% = C
- 77-79% = D+
- 74-76% = D
- 72-73% = D-
- <= 71% = E

Texts
Textbook(s) as determined by program faculty.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for SRG 105

SRG106 - Fundamentals of Surgical Technology Lab

Overview

Subject
Surgical Technician

Academic Department
Health, Education, and Human Services

School
Health & Human Services

Course Description
The course introduces the fundamentals of operating room techniques, emphasizing principles and practices of asepsis and sterilization. Physical and psychosocial aspects of the patient are explored. Included are the roles and responsibilities of the surgical technologist and other surgical team members; identification of common equipment, instruments, and supplies; the perioperative phases and environment; students practice scrubbing, gowning, and gloving, and preparation of the sterile surgical fields. This is a laboratory course.

Course Pre-requisite(s)
Acceptance into the Surgical Technologist AAS Degree program, SRG102 Surgical Technology Intro with a B- or higher, AH100 Medical Terminology, BIO234 Anatomy and Physiology II, BIO135 Microbiology for AHS or 251 all with a C or higher

Course Co-requisite(s)
SRG104 Fund. of Surgical Technology

Credit Hours
1.5

Total Contact Hours

Total Instructor Contact Hours:
45

Total Student Contact Hours:
45

Course Fee
135

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Physical Environment
2. Methods of Disinfection and Sterilization
3. Environmental Disinfection of the Operating Room
4. Hemostasis, Suture, and Wound Healing
5. Biopsychosocial Needs of the Patient
6. Patient Transport and Surgical Positioning
7. Urinary Catheterization
8. Surgical Counts
9. Basic Instrumentation
10. Aseptic Technique
11. Environmental Hazards
12. Aseptic Technique
13. Perioperative techniques and environment

- Demonstrate the roles of surgical team members, noting the moral, professional, and legal responsibility of each.
- Identify the surgical patient's needs before, during, and after surgery.
- Assess the patient's vital signs, before, during, and after surgery.
- Demonstrate the principles and practices of surgical asepsis.
- Identify sutures and suturing techniques that are commonly used in surgical procedures.
- Identify basic surgical instruments and instrument categories, common supplies, and equipment and their uses.
- Demonstrate basic hand hygiene.
- Demonstrate scrubbing, gowning, and gloving for surgical procedures.
- Demonstrate basic surgical prepping, positioning, and draping.
- Demonstrate proper urinary catheterization techniques.
- Modify surgical prepping, positioning, and draping based on factors including anesthesia, surgeon's preference, patient considerations, and safety.
- Demonstrate safety throughout the patient surgical experience.
- Demonstrate preparation for common forms of sterilization used for surgical instruments and supplies.
- Describe common decontamination processes.
- Describe objectives and priorities in emergency situations.

Demonstrate the principles of safe transport of the patient to the OR, including transfer on and off the OR table.
Demonstrate the preoperative routines that must be completed.
Demonstrate the concepts for maintaining the sterile field.
Demonstrate in detail the procedure for counting instruments, sponges, and sharps.
Demonstrate the steps of the postoperative routines.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of academic achievement will include quizzes and competencies.

General Course Requirements and Recommendations
Students must pass this course with a "B-" or better grade to remain in the Surgical Technologist AAS Degree Program.

Students must follow all classroom/ clinical policies described in the most current Surgical Technologist AAS Degree Student Handbook.

Students are required to wear the navy blue HFC program scrubs during all lab classes.

Grading Scale
Student grades will be assigned using the following scale:

- 99-100% = A+
- 94-98% = A
- 90-93% = A-
- 87-89% = B+
- 83-86% = B
- 80-82% = B-
- 76-79% = C+
- 70-75% = C
- 65-69% = D+
- 60-64% = D
- 60% and below = E

Texts
Textbook(s) as determined by program faculty.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for SRG 106

SRG120 - Surgical Procedures I

Overview

Subject
Surgical Technician

Academic Department
Health, Education, and Human Services

School
Health & Human Services

Course Description
Designed to continue to develop the concepts from SRG-104. It features general, gynecology, genitourinary, orthopedic, otorhinolaryngology, and endoscopy surgical procedures. The course also emphasizes the scheme or steps as well as the instrumentation of these surgical interventions. One or two half day operating room (OR) observations are required.

Course Pre-requisite(s)
BIO234 Anatomy and Physiology II, SRG104 Fund. of Surgical Technology, and SRG106 Fund. of Surgical Tech Lab

Course Co-requisite(s)
SRG140 Surgical Techniques I, SRG209 Surgical Externship I

Credit Hours
4

Total Contact Hours
Total Instructor Contact Hours:
62

Total Student Contact Hours:
62

Course Fee
75

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Abdominal Incisions and Closures
2. General Surgery Procedures
3. Gynecological Surgical Procedures
4. Genitourinary Surgical Procedures
5. Otorhinolaryngology Surgical Procedures
6. Orthopedic Surgical Procedures
7. Interventional Radiolody

Describe the surgical patient as a person.
Differentiate the abdominal incisions and closures.
Summarize the perioperative care of the surgical patient.
Describe the appropriate regional anatomy.
Identify surgical instruments, supplies, and equipment used for: general, gynecology, genitourinary, orthopedics, otorhinolaryngology, and endoscopy procedures.
Describe the schemes or steps of common surgical procedures within each covered specialty.
Explain the possible complications and preventions in these surgical specialties.
Describe and apply the principles for creating and maintaining the sterile field and the principles of draping the surgical patient.
Describe the immediate pre-operative and post-operative care of the patient.
Explain productivity during set-up and scrubbing of surgical procedures.
Analyze and apply the use of related specialty items.
Identify the intraoperative requirements for the basic procedures, including the necessary supplies, equipment, and their uses.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of academic achievement will include unit exams, quizzes, Operating Room (OR) observation assignments, and a cumulative final.

General Course Requirements and Recommendations

- Students must pass this course with a "B-" or better grade to remain in the Surgical Technologist AAS Degree Program.
- Students must follow all classroom/clinical policies described in the most current Surgical Technologist AAS Degree Program Student Handbook.
- Students are required to wear HFC navy scrubs for all SRG lab classes.

Grading Scale
Student grades will be assigned using the following scale:

- 99-100% = A+
- 94-98% = A
- 90-93% = A-
- 87-89% = B+
- 83-86% = B

- 80-82% = B-
- 76-79% = C+
- 70-75% = C
- 65-69% = D+
- 60-64% = D
- 60% and below = E

Texts
Textbook(s) determined by program faculty.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for SRG 120

SRG140 - Surgical Techniques I

Overview

Subject
Surgical Technician

Academic Department
Health, Education, and Human Services

School
Health & Human Services

Course Description
Laboratory course designed to develop basic aseptic and sterile techniques used in the perioperative care of the surgical patient. This course focuses on the surgical scrub, gowning and gloving, setting up a sterile field, draping, handling of surgical instruments, and surgical counts. Students practice techniques in a guided lab setting.

Course Pre-requisite(s)
SRG104 Fund. of Surgical Technology, SRG106 Fund. of Surgical Tech Lab, andBIO234 Anatomy and Physiology II

Course Co-requisite(s)
SRG120 Surgical Procedures I, SRG209 Surgical Externship I

Credit Hours
2

Total Contact Hours
Total Instructor Contact Hours:
32

Total Student Contact Hours:
32

Course Fee
100

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics
1. Operating Room Preparation
2. Surgical Scrub, Gowning, and Gloving
3. Sterile Field for Minor Surgical Procedures
4. Opening Count for Minor Surgical Procedures
5. Pass Instruments for Minor Surgical Procedures

Demonstrate an understanding of aseptic techniques used in surgery while performing lab skills.
Demonstrate room preparation for a basic surgical procedure.
Demonstrate the proper clothing, PPE, and personal preparation necessary to do a surgical scrub.
Demonstrate proper technique of a surgical hand scrub.
Demonstrate the proper donning of a surgical gown and gloves.
Demonstrate the correct draping and preparation of the mayo stand, back table, and ring stand for a basic surgical procedure.
Demonstrate correct aseptic technique within the created sterile field.
Demonstrate the correct Identification, handling, and passing of basic surgical instruments.
Demonstrate an opening count for a basic surgical procedure.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Students will be assessed based on their performance in each of the identified areas of practice. Students must complete each unit with a passing grade to satisfactorily complete the course. There will be a cumulative final lab practical and students must earn a passing grade on the final lab practical to complete this course.

General Course Requirements and Recommendations
- Students must pass this course with a "B-" or better grade to remain in the Surgical Technologist AAS Degree Program.
- Students must follow all classroom/clinical policies described in the most current Surgical Technologist AAS Degree Program Student Handbook.
- Students are required to wear HFC navy scrubs for all SRG lab classes.

Grading Scale
Student grades will be assigned using the following scale:

- 99-100% = A+
- 94-98% = A
- 90-93% = A-
- 87-89% = B+
- 83-86% = B
- 80-82% = B-
- 76-79% = C+
- 70-75% = C
- 65-69% = D+
- 60-64% = D
- 60% and below = E

Texts
Textbook(s) determined by program faculty.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for SRG 140

SRG150 - Surgical Techniques II

Overview

Subject
Surgical Technician

Academic Department
Health, Education, and Human Services

School
Health & Human Services

Course Description
Laboratory course designed to prepare students for clinical externship. Students will continue to practice aseptic and sterile techniques used in the perioperative care of the surgical patient. This course focuses on skills developed in SRG-140 and incorporates "mock surgery" and advanced clinical skills in a lab setting. Students practice techniques in a guided lab setting.

Course Pre-requisite(s)
SRG120 Surgical Procedures I, SRG140 Surgical Techniques I and SRG160 Surgical Pharmacology all with a C grade or higher

Credit Hours
2

Total Contact Hours
Total Instructor Contact Hours:
32

Total Student Contact Hours:
32

Course Fee
100

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Operating Room Preparation
2. Surgical Scrub, Gowning, and Gloving
3. Skin Prep and Catheterization
4. Sterile Field Praparation
5. Draping
6. Surgical Counts
7. Wound Dressings
8. Instrument Handling

Demonstrate an understanding of aseptic techniques used in surgery while performing lab skills.
Demonstrate room preparation and set up for a surgical procedure.
Demonstrate a skin prep and catheterization.
Demonstrate proper scrubbing, gowning, and gloving of self.
Demonstrate proper technique for gowning and gloving other team members.
Demonstrate the proper draping and preparation of the mayo stand, back table, and ring stand for a surgical procedure.
Demonstrate the proper draping of the surgical patient.
Demonstrate the proper Identification, handling, and passing of basic surgical instruments for a surgical procedure.
Demonstrate all necessary counts for a surgical procedure.
Demonstrate the proper cleaning and dressing of a surgical wound at the conclusion of surgery.
Demonstrate the proper breakdown of the sterile field and removal of your gown and gloves at the conclusion of a surgical procedure.
Demonstrate briefing and debriefing as related to surgical procedures.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Students will be assessed based on their performance in each of the identified areas of practice. Students must complete each unit with a passing grade to satisfactorily complete the course. There will be a cumulative timed final lab practical and students must earn a passing grade on the final lab practical to complete this course.

General Course Requirements and Recommendations
* Students must pass this course with a "C" or better grade to remain in the Surgical Technologist AAS Degree Program.

* Students must follow all classroom/clinical policies described in the most current Surgical Technologist AAS Degree Program Student Handbook.

* Students are required to wear HFC navy scrubs for all SRG lab classes.

Grading Scale
Student grades will be assigned using the following scale:

- 97-100% = A
- 93-96% = A-
- 90-92% = B+
- 87-89% = B
- 84-86% = B-

- 80-83% = C
- 77-79% = D+
- 74-76% = D
- 72-73% = D-
- <= 71% = E

Texts
Textbook(s) determined by program faculty.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for SRG 150

SRG152 - Advanced Surgical Techniques

Overview

Subject
Surgical Technician

Academic Department
Health, Education, and Human Services

School
Health & Human Services

Course Description
Laboratory course designed to prepare students for clinical externship. Students will continue to practice aseptic and sterile techniques used in the perioperative care of the surgical patient. This course focuses on skills developed in SRG-140 and incorporates "mock surgery" and advanced clinical skills in a lab setting. Students practice techniques in a guided lab setting.

Course Pre-requisite(s)
SRG120 Surgical Procedures I, SRG140 Surgical Techniques I and SRG160 Surgical Pharmacology all with a C grade or higher

Credit Hours
1

Total Contact Hours
Total Instructor Contact Hours:
32

Total Student Contact Hours:
32

Course Fee
100

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Operating Room Preparation
2. Surgical Scrub, Gowning, and Gloving
3. Skin Prep and Catheterization
4. Sterile Field Praparation
5. Draping
6. Surgical Counts
7. Wound Dressings
8. Instrument Handling

Demonstrate an understanding of aseptic techniques used in surgery while performing lab skills.
Demonstrate room preparation and set up for a surgical procedure.
Demonstrate a skin prep and catheterization.
Demonstrate proper scrubbing, gowning, and gloving of self.
Demonstrate proper technique for gowning and gloving other team members.
Demonstrate the proper draping and preparation of the mayo stand, back table, and ring stand for a surgical procedure.
Demonstrate the proper draping of the surgical patient.
Demonstrate the proper Identification, handling, and passing of basic surgical instruments for a surgical procedure.
Demonstrate all necessary counts for a surgical procedure.
Demonstrate the proper cleaning and dressing of a surgical wound at the conclusion of surgery.
Demonstrate the proper breakdown of the sterile field and removal of your gown and gloves at the conclusion of a surgical procedure.
Demonstrate briefing and debriefing as related to surgical procedures.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Students will be assessed based on their performance in each of the identified areas of practice. Students must complete each unit with a passing grade to satisfactorily complete the course. There will be a cumulative timed final lab practical and students must earn a passing grade on the final lab practical to complete this course.

General Course Requirements and Recommendations

- Students must pass this course with a "C" or better grade to remain in the Surgical Technologist AAS Degree Program.
- Students must follow all classroom/clinical policies described in the most current Surgical Technologist AAS Degree Program Student Handbook.
- Students are required to wear HFC navy scrubs for all SRG lab classes.

Grading Scale
Student grades will be assigned using the following scale:

- 97-100% = A
- 93-96% = A-
- 90-92% = B+
- 87-89% = B

- 84-86% = B-
- 80-83% = C
- 77-79% = D+
- 74-76% = D
- 72-73% = D-
- <= 71% = E

Texts
Textbook(s) determined by program faculty.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for SRG 152

SRG160 - Surgical Pharmacology

Overview

Subject
Surgical Technician

Academic Department
Health, Education, and Human Services

School
Health & Human Services

Course Description
A study of medications used in the operating room with an emphasis on the common drugs used in the surgical area. This course examines the administration, actions, interactions, side effects, and terminology of perioperative medications. Included are legal responsibilities of the surgical technologist and common calculations performed in a sterile field. The student must present two reports as well as complete a term paper.

Course Pre-requisite(s)
SRG104 Fund. of Surgical Technology, SRG106 Fund. of Surgical Tech Lab, BIO234 Anatomy and Physiology II, MATH100 Basic Tech Mathematics or higher

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
50

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Basic Mathematics
2. Basic Pharmacology, Including Drug Relations and Administration
3. Legal/Ethical Responsibilities of the Surgical Technologist & OR Team Members as it Relates to Surgical Pharmacology
4. Antibiotics, Diagnostic Agents, Diuretics, Gastric Drugs, Hormones
5. Drugs that Effect Coagulation, Ophthalmic Drugs, Preoperative and Intraoperative Medications
6. Blood and Fluid Replacements
7. Anesthesia
8. Emergency Situations & Medications

Apply the common pharmacology terms, abbreviations, and symbols.
Explain the principles and practices of surgical pharmacology.
Identify the classifications of drugs used in the surgical area.
Describe the common drugs used during the perioperative phases of care.
Categorize the actions and mode of administration of the more common surgical medications.
Describe drugs found on a cardiac arrest cart and their actions.
Describe symptoms of toxicity and over dose.
Compare and contrast methods, agents, and techniques of anesthesia administration.
Explain anesthesia complications and interventions.
Prepare and manage medications and solutions commonly used within the operative field.
Explain the ethical and legal responsibilities of the surgical technologist and other OR team members as they relate to surgical pharmacology.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of academic achievement will be based on class participation, student presentations/reports, quizzes, unit exams, and a cumulative final.

General Course Requirements and Recommendations
Students must pass this course with a "B-" or better grade to remain in the Surgical Technologist AAS Degree Program.

Students must follow all classroom/ clinical policies described in the most current Surgical Technologist AAS Degree Student Handbook.

Grading Scale
Student grades will be assigned using the following scale:

- 99-100% = A+
- 94-98% = A
- 90-93% = A-
- 87-89% = B+
- 83-86% = B
- 80-82% = B-
- 76-79% = C+
- 70-75% = C
- 65-69% = D+

- 60-64% = D
- 60% and below = E

Texts
Required -Textbook(s) as determined by program faculty

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for SRG 160

SRG209 - Surgical Externship I

Overview

Subject
Surgical Technician

Academic Department
Health, Education, and Human Services

School
Health & Human Services

Course Description
A clinical practicum further developing concepts presented in previous SRG courses. Students are assigned to an affiliate agency where they actively participate as members of the surgical team, developing skills necessary to "scrub" and assisting in "circulating" during surgical procedures under supervision. Sixteen hours per week.

Course Pre-requisite(s)
SRG104 Fund. of Surgical Technology, SRG106 Fund. of Surgical Tech Lab, BIO234 Anatomy and Physiology II

Course Co-requisite(s)
SRG120 Surgical Procedures I, SRG140 Surgical Techniques I

Credit Hours
5

Total Contact Hours
Total Instructor Contact Hours:
240

Total Student Contact Hours:
240

Course Fee
100

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Preclinical lab practice and assessments
2. Preference Cards
3. OR Room Setup and Turnovers
4. Sterile Field and Aseptic Technique
5. Instrumentation and Steps for Course Specialties
6. Draping
7. Intraoperative Scrubbing

Demonstrate skills to assist in the perioperative preparation of the surgical patient.
Select appropriate surgeon's preference card.
Handle sterile items, set-up a sterile field, and maintain sterile technique.
Identify and select the appropriate instruments, sutures, and supplies for procedures.
Scrub, gown, and set up a sterile field without contamination within an acceptable amount of time.
Demonstrate principles and practices of surgical asepsis.
Organize and arrange sterile items on OR back table and Mayo stand.
Demonstrate proper techniques of safe patient care.
Demonstrate a safe level of practice and knowledge in selected surgical areas.
Demonstrate an awareness of the patient as well as the task.
Apply knowledge of common instruments and schemes for: general surgery, gynecology, urology, otorhinolaryngology, orthopedic surgery, and endoscopy procedures.
Demonstrate anticipation of surgeon's needs and acceptance of responsibilities in the clinical area.
Assist surgeon in draping the patient and placement of electrosurgical items, suction, and light handles.
Demonstrate dexterity and good coordination skills during surgical procedures.
Count sponges, instruments, and sharps at the appropriate time.
Explain circulating duties.
Assist with cleaning and transporting patient from OR table to stretcher.

Communicate clearly and effectively with peers and hospital staff.
Utilize concepts of medical, moral, legal ethics, patients' rights, and basic needs.
Demonstrate ability to do room change-overs.
Demonstrate ability to prepare instruments and supplies for sterilization.
Maintain a Scrub Log as outlined by the program.
Demonstrate basic skills for an entry level surgical technologist.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of academic achievement will be based on examinations, clinical evaluations, clinical attendance, and student log forms. This course requires a minimum 80% average to pass the course.
General Course Requirements and Recommendations
Students must pass this course with a "C" or better grade to remain in the Surgical Technologist AAS Degree Program. Students must follow all classroom/ clinical policies described in the most current Surgical Technologist AAS Degree Clinical Student Handbook. By the completion of SRG290 Clinical Externship II and including clinical case load from SRG209 Surgical Externship I and SRG290 Clinical Externship II students MUST complete the following Surgical Rotation Case Requirements:

- The total number of cases the student must complete = 120.
    - Maximum number of Second Scrub Role cases that can be applied towards the 120 cases are 10 in General Surgery and 30 in the other surgical specialties.
- Student must complete 30 cases in General Surgery.
    - 20 of these cases must be in the First Scrub Role.
- Students must complete 90 cases in various surgical specialties.
    - 60 must be in the First Scrub Role.
    - These cases must be evenly distributed between a minimum of 5 surgical specialties.
    - No more than 15 cases can be counted in any one specialty.
- Up to 10 diagnostic Endoscopic cases and 5 vaginal delivery cases can be counted towards the maximum number of Second Scrub Role cases.

Grading Scale
Student grades will be assigned using the following scale::

- 99-100% = A+
- 94-98% = A
- 90-93% = A-
- 87-89% = B+
- 83-86% = B
- 80-82% = B-
- 76-79% = C+
- 70-75% = C
- 65-69% = D+
- 60-64% = D
- 60% and below = E

Texts
Required: Textbook(s) as determined by program faculty

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for SRG 209

SRG220 - Surgical Procedures II

Overview

Subject
Surgical Technician

Academic Department
Health, Education, and Human Services

School
Health & Human Services

Course Description
Designed to further develop the student's knowledge of advanced surgical procedures. It features cardiovascular, thoracic, neurologic, oral, ophthalmic, plastic and reconstruction, pediatric, and geriatric surgical procedures.

Course Pre-requisite(s)
SRG120 Surgical Procedures I, SRG140 Surgical Techniques I, SRG160 Surgical Pharmacology, SRG209 Surgical Externship I, all with a B- or better

Course Co-requisite(s)
SRG240 Issues in Surgical Technology, SRG290 Clinical Externship II

Credit Hours
4

Total Contact Hours
Total Instructor Contact Hours:
62

Total Student Contact Hours:
62

Course Fee
75

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Cardiovascular Surgery Procedures
2. Thoracic Surgical Procedures
3. Neuro Surgical Procedures
4. Ophthalmic Surgical Procedures
5. Oral, Plastic and Reconstructive Surgical Procedures
6. Pediatric and Geriatric Surgical Procedures

Summarize the perioperative care of the surgical patient.
Explain regional anatomy related to each advanced surgical procedure.
Identify the intraoperative requirements for the advanced procedures, including surgical instruments, supplies, and equipment used for: cardiovascular, thoracic, neurologic, oral, ophthalmic, reconstruction, pediatric, and geriatric procedures.
Describe the schemes or steps of common surgical procedures within each covered specialty.
Explain the possible complications and preventions within these surgical specialties.
Explain the proper care of surgical specimens.
Summarize the various types and uses of surgical dressings.
Describe the efficiency and effectiveness during set-up of the surgical procedures.
Analyze and apply the use of related specialty items.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of academic achievement will be based on unit exams, quizzes, and a cumulative final.

General Course Requirements and Recommendations

- Students must pass this course with a "B-" or better grade to remain in the Surgical Technologist AAS Degree Program.
- Students must follow all classroom/clinical policies described in the most current Surgical Technologist AAS Degree Program Student Handbook.
- Students are required to wear HFC navy scrubs for all SRG lab classes.

Grading Scale
Student grades will be assigned using the following scale:

- 99-100% = A+
- 94-98% = A
- 90-93% = A-
- 87-89% = B+
- 83-86% = B
- 80-82% = B-
- 76-79% = C+
- 70-75% = C
- 65-69% = D+
- 60-64% = D
- 60% and below = E

Texts
Textbook(s) determined by program faculty.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for SRG 220

SRG240 - Issues in Surgical Technology

Overview

Subject
Surgical Technician

Academic Department
Health, Education, and Human Services

School
Health & Human Services

Course Description
Students will identify and discuss advanced surgical procedures focusing upon trauma, transplants, major orthopedic procedures, and the basic principles in the application of robotics in surgery. Electrical elements/concerns in the operating room will be discussed. All-Hazard Preparation will be discussed. The course will also emphasize the elements of professional development including professional organizations, leadership, teamwork, certification and continuing education. Students will discuss the role of the AST and its impact upon careers in surgical technology. Employability skills will be reviewed and applied. Students will be introduced to techniques and exercises in preparation for the national Certified Surgical Technologist (CST) exam. Written and oral presentations by the students are key elements of this course. NOTE: All students will be required to sit for the NBSTSA - CST exam as part of this course.

Course Pre-requisite(s)
SRG102 Surgical Technology Intro, SRG140 Surgical Techniques I, SRG160 Surgical Pharmacology, SRG209 Surgical Externship I, all with a B- or better

Course Co-requisite(s)
SRG220 Surgical Procedures II, SRG290 Clinical Externship II

Credit Hours
4

Total Contact Hours
Total Instructor Contact Hours:
62

Total Student Contact Hours:
62

Course Fee
75

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Surgical Application of Robotics
2. All-Hazard Preparation
3. National Certification Exam Preparation
4. ST Professional Associations and Activities
5. Employment Strategies
6. Surgical Trauma
7. Organ Harvesting
8. Advanced Surgical Procedures

Apply the advanced surgical concepts used within the surgical setting, especially in more advanced surgical procedures.
Apply the basic concepts and terminology for robotics, and electricity as they pertain to the safe care of the patient in the OR.
Describe All-Hazard Preparation and the related competency domains.
Define personal and professional relationships with others on the surgical team.
List professional organizations related to surgery.
Prepare a resume and identify techniques to keep it current.
Apply factors that will increase job-seeking skills.
Analyze factors that influence job retention.
List methods of continuing education.
Identify possible career opportunities.
Apply various techniques to improve their success in taking the national certification.
Complete application for national CST exam.
All students will be required to complete the NBSTSA CST exam.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
This is a seminar style course. Assessment of academic achievement will include a combination of class participation, assignments, and presentations.
General Course Requirements and Recommendations
A minimum grade of 80% is required to pass this course.
Grading Scale
Student grades will be assigned using the following scale:

- 99-100% = A+
- 94-98% = A
- 90-93% = A-
- 87-89% = B+

- 83-86% = B
- 80-82% = B-
- 76-79% = C+
- 70-75% = C
- 65-69% = D+
- 60-64% = D
- 60% and below = E

Texts
Required: Textbook(s) as determined by program faculty.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for SRG 240

SRG290 - Clinical Externship II

Overview

Subject
Surgical Technician

Academic Department
Health Careers

School
Health & Human Services

Course Description
A practicum that further develops clinical proficiency. Students are assigned to an affiliated agency where they practice skills related to surgical techniques and principles. They participate as members of the surgical team, developing skills necessary to "scrub" and assist in "circulating" during surgical procedures. Students will be required to function in the first-scrub role in most surgical procedures. Twenty-four hours per week.

Course Pre-requisite(s)
SRG102 Surgical Technology Intro, SRG140 Surgical Techniques I, SRG160 Surgical Pharmacology, SRG209 Surgical Externship I, all with a B- or better

Course Co-requisite(s)
SRG220 Surgical Procedures II, SRG240 Issues in Surgical Technology

Credit Hours
8

Total Contact Hours
Total Instructor Contact Hours:
360

Total Student Contact Hours:
360

Course Fee
205

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Preference Cards
2. OR Room Setup and Turnovers
3. Sterile Field and Aseptic Technique
4. Instrumentation and Procedural Steps for All Surgical Specialties
5. Draping, Specimens, and Dressings
6. Flash Autoclave Use

Demonstrate skills to assist in the perioperative preparation of the surgical patient.
Select appropriate surgeon's preference card.
Handle sterile items, set-up a sterile field, and maintain sterile technique.
Identify and select the appropriate instruments, sutures, and supplies for procedures.
Scrub, gown, and set up a sterile field without contamination within an acceptable amount of time.
Demonstrate principles and practices of surgical asepsis.
Organize and arrange sterile items on OR back table and Mayo stand.
Demonstrate proper techniques of safe patient care.
Demonstrate a safe level of practice and knowledge in all surgical areas.
Demonstrate an awareness of the patient as well as the task.
Operate Flash Autoclaves.
Demonstrate progressive ability to work as a member of the OR team.
Apply knowledge of common instruments and schemes for: ophthalmic, cardiovascular, thoracic, neuro, oral, plastic-reconstruction surgery, pediatric, and geriatric surgical procedures.
Demonstrate anticipation of surgeon's needs and acceptance of responsibilities in the clinical area.
Assist the surgeon in draping the patient and placement of electrosurgical items, suction, and light handles.
Demonstrate dexterity and good coordination skills during surgical procedures.
Count sponges, instruments, and sharps with minimum supervision.
Explain circulating duties.

Assist with cleaning and transporting patient from OR table to stretcher.
Communicate clearly and effectively with peers and hospital staff.
Utilize concepts of medical, moral, legal ethics, patients' rights, and basic needs.
Demonstrate ability to do room change-over.
Demonstrate ability to prepare instruments and supplies for sterilization.
Demonstrate ability to prepare medications and fluids in the sterile field.
Explain principles of drains, suction tubes, and dressings.
Explain patient's vital signs and recognize variations from normal.
Maintain a Scrub Log as outlined by the department.
Demonstrate clinical skills for entry level surgical technologist.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of academic achievement will include examinations, clinical evaluations, clinical attendance, and student log forms.
General Course Requirements and Recommendations
A minimum grade of 80% is required to pass this course to complete the Surgical Technologist AAS Degree (SRG) Program. Students must follow all classroom/ clinical policies described in the most current Surgical Technologist AAS Degree Clinical Student Handbook. By the completion of SRG290 Clinical Externship II and including clinical case load from SRG209 Surgical Externship I and SRG290 Clinical Externship II students MUST complete the following Surgical Rotation Case Requirements:

- The total number of cases the student must complete = 120
    - Maximum number of Second Scrub Role cases that can be applied towards the 120 cases are 10 in General Surgery and 30 in the other surgical specialties.
- Student must complete 30 cases in General Surgery.
    - 20 of these cases must be in the First Scrub Role.
- Students must complete 90 cases in various surgical specialties.
    - 60 must be in the First Scrub Role.
    - These cases must be evenly distributed between a minimum of 5 surgical specialties.
    - No more than 15 cases can be counted in any one specialty.
- Up to 10 diagnostic Endoscopic cases and 5 vaginal delivery cases can be counted towards the maximum number of Second Scrub Role cases.

Grading Scale
Student grades will be assigned using the following scale:

- 99-100% = A+
- 94-98% = A
- 90-93% = A-
- 87-89% = B+
- 83-86% = B
- 80-82% = B-
- 76-79% = C+
- 70-75% = C
- 65-69% = D+
- 60-64% = D
- 60% and below = E

Texts
Required: Textbook(s) as determined by program faculty

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for SRG 290

SSC131 - Survey of the Social Sciences

Overview

Subject
Sociology

Academic Department
Social Sciences

School
Liberal Arts

Course Description
Surveys the several disciplines found under the general heading of social sciences: Anthropology, Economics, Geography, Ecology and Demography, Psychology, Sociology and Political Science. This course also presents the development of each discipline and its important concepts. This course meets the HFCC General Education and graduation requirement for the American Society, Events, Institutions and Cultures outcome.

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
10

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
Determined by department

Goals, Topics, and Objectives

Core Course Topics

1. The scientific method
2. Human origins
3. Culture
4. Ecology, geography and demography
5. The family as a social institution
6. Educational systems as social institutions
7. Religion as a social institution
8. U.S. government and political system
9. Social class and racial stratification

Discuss the basic principles and assumptions that guide social scientists in the scientific analysis of social life.
Identify the purpose of social science and identify the similarities and differences between social science, natural science, biological science and the humanities.
Identify the basic elements of a scientific perspective, including curiosity, skepticism, objectivity, a cause-and-effect orientation, and the use and limits of experimental methods.
Describe the steps in the scientific method and explain the role of theories, hypotheses and data collection.
Describe the use of statistics and correlations in the effort to identify the causes and solutions to problems.
Demonstrate an understanding of scientific theories of human origins.
Summarize Darwin's theory of evolution.
Explain the role of mutation in the theory of evolution.
Describe the relation of DNA to genes and genetic engineering.
Describe the differences between primates, hominids and humans.
Describe what culture includes, in both the material and non-material realms, and how it influences human behavior and thinking.
Explain why culture is necessary to hold society together.
Define the key characteristics of culture.
Explain several factors that bring about cultural change.
Explain several factors that promote cultural stability.
Explain the doctrine of cultural relativism.

Describe the ways that geography, ecology, and demography affect human social life.

Describe the differences between disciplines of geography, ecology, and demography.

Describe some of the ways geography influences human social life.

Describe demographic determinants of population growth in relation to different parts of the world today.

Describe some of the major threats to the ecological balance in today's world.

Discuss the main characteristics of family life used by social scientists to classify the family institution in different societies.

Describe the variations in forms of family life with regard to the number of mates, selection of mates, family control, and reckoning of descent.

Explain what it means to refer to the functions of the family and describe at least three key functions of families in human societies.

Describe characteristics of family life in the contemporary United States with regard to child-rearing, mate selection and marriage, divorce and alternative family forms.

Choose three of the characteristics of family life in 5.3 and explain how they affect the functions of families in the U.S. today.

Discuss the similarities and differences in educational institutions in different societies.

Explain why the U.S. school system is referred to as a "unitary school system" and how this system is different from those in other countries.

Explain how K-12 education is financed and the social consequences of this method of financing.

Explain how schools serve as agents of social control.

Describe the main problems facing the American school system and recent developments in American education.

Discuss how religious traditions function in societies and in the lives of individuals.

Describe how systems of religious beliefs, practices, and values affect culture and society.

Explain how religions and their institutions promote both social stability and change.

Describe how religions affect the lives of individuals in a society.

Identify and describe in general terms the characteristics of the major world religious traditions.

Explain the U.S. Constitutional principles and the characteristics of the American political system.

Discuss the differences between presidential and parliamentary forms of democracy.

Explain the concept of judicial review.

Describe federalism and tell how a federal form of government differs from unitary and confederal systems.

Discuss the major concepts used by social scientists in the analysis of social class and racial stratification.

Explain the differences between stratification based on castes and stratification based on social classes.

Explain the difference between social stratification and social mobility.

Define the concept of class consciousness and discuss some reasons why class consciousness in the U.S. has historically been low.

Compare and contrast the use of race and ethnic group as ways of classifying people and discuss problems with using these categories.

Compare and contrast prejudice and discrimination.

Demonstrate an understanding of the foundations and operations of American social/political institutions and culture in the context of a diverse global community.

Identify and describe the foundations of American social/political institutions.

Analyze the operations of American social/political institutions and culture in the context of a diverse global community.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Each instructor will identify and implement appropriate methods to assess the achievement of the Learning Objectives for the course. All instructors teaching the course will participate in two common forms of assessment:

1. A comprehensive final examination which includes a course assessment consisting of 35 multiple-choice questions. These 35 questions will be answered on a separate ScanTron form and will constitute at least 10% of the final exam grade.
2. A written assignment to be completed outside of class and given an appropriate period of time for completion. This assignment will focus on one of the topics identified in the Topical Course Outline, and will involve comparisons with, or connections between, the United States and another society, nation or culture. This may involve international comparisons or multicultural issues within the United States (i.e., immigrant communities). This assignment will constitute 20% of the final course grade.
    - The assignment must take one of the following forms.
    - A journal project in which students summarize and analyze 5 or more articles on (a) a country, (b) a region (e.g., Latin America or the Pacific Rim), or (c) a social or policy issue with global implications (e.g., immigration policy, global warming, or child labor).
    - A research paper that contrasts the United States with one or more countries, addressing one of the institutional domains of the course: culture, family, educational systems, religion as a social institution, government/political systems, social class/ racial stratification.
    - A critical review of an article from a professional journal which has global implications, in which the student summarizes the article, relates the topic to class materials, and properly cites the source.

Texts
The following text is recommended for this course: Elgin F. Hunt and David C. Colander, Social Science: An Introduction to the Study of Society, 11th edition (Boston: Allyn and Bacon)

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for SSC 131

SSC235 - Topics in Social Science

Overview

Subject
Sociology

Academic Department
Social Sciences

School
Liberal Arts

Course Description
Provides special study on a topic in the Social Sciences, organized by subject, field of inquiry, or other criteria. This course may be taken twice for credit, six hours maximum, but the two topics must be different. Specific topics and any prerequisites are listed in the current semester's class schedule or may be obtained through the Social Science Division office.

Course Pre-requisite(s)
ENG131 Introduction College Writing eligible and Instructor Permission

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
10

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Methodolgy
    - Apply the methodology or methodologies of the discipline to a given issue. See individual syllabus for details.
2. Content-specific issue
    - Identify and give the significance of the issue of the specific course.* See individual syllabus for details.
    - Develop and evaluate solutions to a problem or problems relating to the specific issue if applicable. See individual syllabus for details.

Apply the methodology or methodologies of the discipline to a given issue. See individual syllabus for details.

Identify and give the significance of the issue of the specific course. See individual syllabus for details.

Develop and evaluate solutions to a problem or problems relating to the specific issue if applicable. See individual syllabus for details.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Each instructor will identify and implement appropriate methods to assess the achievement of the learning objectives for the course.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for SSC 235

SSCO190 - Co-op in Social Science

Overview

Subject
Sociology

Academic Department
Social Sciences

School
Liberal Arts

Course Description
Cooperative education is a structured method of combining classroom-based education with practical work experience. A cooperative education experience, commonly known as a "co-op," provides academic credit for structured employment experience. Work experience must be directly related to the student's declared major to be eligible. To register for this course, a student must have completed 50% of core coursework, maintain an overall GPA of 2.0 and a program specific GPA of 2.5.

Course Pre-requisite(s)
Permission from Career Services Officer or Job Developer in the Office of Career Services

Credit Hours
1

Total Contact Hours

Total Instructor Contact Hours:
3

Total Student Contact Hours:
75

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
Student will submit a formal request in writing to the faculty and Associate Dean for work experience to be considered for Credit for Prior College-Level Learning.

The student will complete an interview, a reflective paper, or a presentation to the faculty in which the student develops and describes the learning objectives supported by the work experience, how those learning objectives were achieved and how that learning was put into practice.

Finally, the student must also provide a portfolio (or something comparable) that shows the work completed and provide some form of documentation confirming the work experience (a resume does not suffice) for which Credit for Prior College-Level Learning is requested.

Goals, Topics, and Objectives

Course Goals
Cooperative education helps students make the school-to-work transition, develop career and program-related learning objectives, and work on applicable skills for employment. Placements should provide students with the opportunity to apply and expand upon knowledge learned in the classroom, and develop the skills acquired in their coursework to align with the standards and expectations set by the worksite.

Core Course Topics

1. Core Career-Focused Topics:

    A. Professional Dress and Demeanor (attitude, posture, courteousness)

    B. Workplace Communication

    C. Interviewing Skills

    D. Resume Building

    E. Networking and Social Media

    F. Seeking Employment G. Career Advancement

1-3 program specific learning objectives will be developed by the instructor for each individual offering.

Students will create 1-3 learning objectives per credit to be approved by instructor for each individual offering.

Career Services-defined: Build a resume that meets standards of Career Services Officer.

Articulate the reasons for professional attire.

Wear professional attire while on the worksite.

Attend career workshop in professional dress.

Display appropriate professional attitude and demeanor while on the worksite.

Interview effectively.

Attend mock interview, give appropriate answers to five 5 questions.

Complete a written job application in a prompt, professional manner with all information legible, error-free, and thorough.

Display understanding of the appropriate use of Social Media sites (Facebook, LinkedIn, and Twitter) during Career Services workshop.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment will be determined by the instructor based on what is in the best interest of the student's academic growth, including future employability of the student. Assessment may include, but isn't limited to:
Major final project
Weekly journal
Creation and attainment of all learning objectives
Participation in a career-focused workshop
Consistent and prompt attendance at worksite
Employer evaluation

General Course Requirements and Recommendations
To be determined by the instructor. Detailed course syllabi will be standardized for all co-op courses and individual course requirements will be available to the Area Council and College Council by request "For information only" for each term that the course is offered.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for SSCO 190

SSCO290 - Co-op in Social Sciences

Overview

Subject
Sociology

Academic Department
Social Sciences

School
Liberal Arts

Course Description
Cooperative education is a structured method of combining classroom-based education with practical work experience. A cooperative education experience, commonly known as a "co-op," provides academic credit for structured employment experience. Work experience must be directly related to the student's declared major to be eligible. To register for this course, a student must have completed 50% of core coursework, maintain an overall GPA of 2.0 and a program specific GPA of 2.5.

Course Pre-requisite(s)
Permission from Career Services Officer or Job Developer in the Office of Career Services

Credit Hours
2

Total Contact Hours
Total Instructor Contact Hours:
3

Total Student Contact Hours:
150

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
Student will submit a formal request in writing to the faculty and Associate Dean for work experience to be considered for Credit for Prior College-Level Learning.

The student will complete an interview, a reflective paper, or a presentation to the faculty in which the student develops and describes the learning objectives supported by the work experience, how those learning objectives were achieved and how that learning was put into practice.

Finally, the student must also provide a portfolio (or something comparable) that shows the work completed and provide some form of documentation confirming the work experience (a resume does not suffice) for which Credit for Prior College-Level Learning is requested.

Goals, Topics, and Objectives

Course Goals
Cooperative education helps students make the school-to-work transition, develop career and program-related learning objectives, and work on applicable skills for employment. Placements should provide students with the opportunity to apply and expand upon knowledge learned in the classroom, and develop the skills acquired in their coursework to align with the standards and expectations set by the worksite.

Core Course Topics
1. Core Career-Focused Topics:
   - A. Professional Dress and Demeanor (attitude, posture, courteousness)
   - B. Workplace Communication
   - C. Interviewing Skills
   - D. Resume Building
   - E. Networking and Social Media
   - F. Seeking Employment
   - G. Career Advancement

1-3 Program specific learning objectives will be developed by the instructor for each individual offering.
Students will create 1-3 learning objectives per credit to be approved by instructor for each individual offering.
Build a resume that meets standards of Career Services Officer.
Articulate the reasons for professional attire.
Wear professional attire while on the worksite.
Attend career workshop in professional dress.
Display appropriate professional attitude and demeanor while on the worksite.
Interview effectively.
Attend mock interview, give appropriate answers to five 5 questions.
Complete a written job application in a prompt, professional manner with all information legible, error-free, and thorough.
Display understanding of the appropriate use of Social Media sites (Facebook, LinkedIn, and Twitter) during Career Services workshop.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment will be determined by the instructor based on what is in the best interest of the student's academic growth, including future employability of the student. Assessment may include, but isn't limited to:
Major final project
Weekly journal
Creation and attainment of all learning objectives
Participation in a career-focused workshop
Consistent and prompt attendance at worksite
Employer evaluation

General Course Requirements and Recommendations
To be determined by the instructor. Detailed course syllabi will be standardized for all co-op courses and individual course requirements will be available to the Area Council and College Council by request "For information only" for each term that the course is offered.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for SSCO 290

SWK131 - Introduction to Social Work

Overview

Subject
Social Work

Academic Department
Health, Education, and Human Services

School
Health & Human Services

Course Description
The course takes a generalist practitioner approach to introduce social work philosophy, values, ethics, and the social work processes embedded within the field. This course is intended to provide students with a basic knowledge of the different elements of the social systems approach and how change can affect an individual's and family's ability to meet human needs.

Course Pre-requisite(s)
ENG131 Introduction College Writing Eligible

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
25

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics
1. Social work philosophy, values, and ethics (National Association of Social Workers (NASW) Ethics)
2. Social work professions, degrees and certifications
3. History of social welfare practices
4. Social work system approaches
5. Social work resources
6. Vulnerable groups served at internship
7. Human services social work resources at internship
8. Social worker professionalism

Analyze the historical factors affecting current social work trends.

Compare and contrast the different professional social worker roles.

Identify and discuss the application of social systems approaches.

Discuss vulnerable groups and their representation in human services agency as well as their social, financial, and political challenges.

Compare and contrast the different professional social worker roles.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of academic achievement may include, but not limited to case studies, quizzes, research projects, research papers, daily interactive journals, group assignments, and final exam.

General Course Requirements and Recommendations
Students must have a cleared criminal background check within the last year.

Grading Scale
Students must earn at least 70% to earn a C grade.

Grading scale for exams and the final grade:

- 98-100% = A+
- 93-97% = A
- 90-92% = A-
- 87-89% = B+
- 83-86% = B
- 80-82% = B-
- 76-79% = C+
- 70-75% = C
- 67-69% = D+
- 63-66% = D
- 60-62% = D-
- 59% & below = E

Texts
To be determined by Program Faculty

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for SWK 131

SWK150 - Counseling and Interviewing Skills

Overview

Subject
Social Work

Academic Department
Health, Education, and Human Services

School
Health & Human Services

Course Description
Introduces the basic techniques of interviewing, counseling, and treatment therapies used in the mental health and social work fields. The course will expand on the historical and political aspects of the field of social work.

Course Pre-requisite(s)
SWK131 Introduction to Social Work

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
25

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics
1. Counseling and social work theories
2. Counseling and social work techniques

Discuss counseling, mental health, and social work philosophies, values, and ethics.

Analyze the historical factors affecting current counseling, mental health, and social work trends.

Compare and contrast different frameworks and the varying political systems motivating those frameworks.

Identify vulnerable groups within the U.S. society.

Identify and interpret political factors which contribute to society's desires or refusals to supply needed services.

Define the roles and functions of a community-based social service technician or a member of a clinical treatment or recovery support services team.

Compare and contrast different counseling and social work techniques.

Identify processes, programs, organizations, and tangible resources that are available to those in need.

Participate in active listening and communication activities.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of academic achievement may include, but not be limited to case studies, quizzes, research projects, research papers, group assignments, and/or final exam.

General Course Requirements and Recommendations
Students must have a cleared criminal background check within the last year.

Grading Scale
Students must earn at least 70% to earn a C grade.

Grading scale for exams and the final grade:

- 98-100% = A+
- 93-97% = A
- 90-92% = A-
- 87-89% = B+
- 83-86% = B
- 80-82% = B-
- 76-79% = C+
- 70-75% = C
- 67-69% = D+
- 63-66% = D
- 60-62% = D-
- 59% & below = E

Texts
To be determined by program faculty.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for SWK 150

SWK160 - Interpersonal Dyn: Theories & Practices

Overview

Subject
Social Work

Academic Department
Health, Education, and Human Services

School
Health & Human Services

Course Description
Introduces interpersonal theories used when working with clients. The course will focus on behavior modification, transactional analysis, cognitive approaches, assertiveness training, and addictions theory. Community resources and the referral process will also be researched and analyzed.

Course Pre-requisite(s)
SWK131 Introduction to Social Work

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
25

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Counseling and social work interpersonal theories and practice
2. Behavior Modification
3. Transactional Analysis
4. Cognitive Approaches
5. Assertiveness Training
6. Addictions Theory

Discuss theoretical and philosophical mental health assumptions.

Identify issues with the application of counseling theories to intervention and planning.

Discuss the application of counseling theories to a diverse community of patients.

Discuss how interpersonal theory and practice are used in a clinical setting.

Describe processes and techniques used in the practice of counseling and social work.

Understand counseling outcomes and develop techniques for relaying information to patients.

Explore the components of behavior modification.

Analyze a behavior modification plan.

Describe transactional analysis.

Identify when transactional analysis has occurred.

Compare and contrast different cognitive approaches.

Model the use of assertiveness training.

Discuss addictions theory and its applications to social work and counseling practice.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of academic achievement may include, but not be limited to case studies, quizzes, research projects, research papers, group assignments, and/or final exam.

General Course Requirements and Recommendations
Students must have a cleared criminal background check within the last year.

Grading Scale
Students must earn at least 70% to earn a C grade.

Grading scale for exams and the final grade:

- 98-100% = A+
- 93-97% = A
- 90-92% = A-
- 87-89% = B+
- 83-86% = B
- 80-82% = B-
- 76-79% = C+
- 70-75% = C
- 67-69% = D+
- 63-66% = D
- 60-62% = D-
- 59% & below = E

Texts
To be determined by program faculty

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for SWK 160

SWK201 - Group Dynamic: Theories and Practices

Overview

Subject
Social Work

Academic Department
Health, Education, and Human Services

School
Health & Human Services

Course Description
Explores mental health theories used when working with clients and provides the students with the opportunity to practice these theories in a simulated environment. The course will focus on group dynamics as used in the treatment modalities of the mental health fields, education, and social work fields.

Course Pre-requisite(s)
SWK150 Counseling & Interviewing Skil, SWK160 Interpersonal Dynamics

Credit Hours
4

Total Contact Hours

Total Instructor Contact Hours:
62

Total Student Contact Hours:
62

Course Fee
25

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Counseling group dynamics theories
2. Counseling group dynamics techniques

Explain the various types of group dynamics theories.

Explain the ethical and professional guidelines for group leaders.

Apply the various types of group dynamics techniques.

Co-lead a group therapy model in class.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of academic achievement may include, but not be limited to case studies, quizzes, research projects, research papers, group assignments, and/or final exam.

General Course Requirements and Recommendations
Students must have a cleared criminal background check within the last year.

Grading Scale
Students must earn at least 70%to earn a C grade. Grading scale for exams and the final grade:

- 98-100% = A+
- 93-97% = A
- 90-92% = A-
- 87-89% = B+
- 83-86% = B
- 80-82% = B-
- 76-79% = C+
- 70-75% = C
- 67-69% = D+
- 63-66% = D
- 60-62% = D-
- 59% & below = E

Texts
To be determined by program faculty.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for SWK 201

SWK202 - Family Systems: Theories and Practices

Overview

Subject
Social Work

Academic Department
Health, Education, and Human Services

School
Health & Human Services

Course Description
This course further explores mental health theories used when working with clients. The focus of the course is on family systems theory. The course will focus on assessment procedures, including genograms and ecomaps, family sculpturing, art therapy, and treatment planning.

Course Pre-requisite(s)
SWK150 Counseling & Interviewing Skil and SWK160 Interpersonal Dynamics

Credit Hours
4

Total Contact Hours

Total Instructor Contact Hours:
62

Total Student Contact Hours:
62

Course Fee
25

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Assessment Procedures
2. Family systems counseling techniques
3. System analysis of family dynamics

Describe the various family systems theories.

Compare and contrast the following assessment procedures:
Genograms, ecomaps, family sculpturing, and art therapy.

Identify when to apply the above assessment procedures in a simulated environment.

Examine the different treatment techniques when working with family systems settings.

Apply proper assessment procedures therapy when working with family systems settings.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of academic achievement may include, but not be limited to case studies, quizzes, research projects, research papers, group assignments, and/or final exam.

General Course Requirements and Recommendations
Students must have a cleared criminal background check within the last year.

Grading Scale
Students must earn at least 70% to earn a C grade. Grading scale for exams and the final grade:

- 98-100% = A+
- 93-97% = A
- 90-92% = A-
- 87-89% = B+
- 83-86% = B
- 80-82% = B-
- 76-79% = C+
- 70-75% = C
- 67-69% = D+
- 63-66% = D
- 60-62% = D-
- 59% & below = E

Texts
To be determined by program faculty.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for SWK 202

SWK290 - Social Work Practicum

Overview

Subject
Social Work

Academic Department
Health, Education, and Human Services

School
Health & Human Services

Course Description
This course is 24 hours per week of field experience. Field experience will provide students the opportunity to learn at a cooperating mental health agency, under the guidance of a licensed professional, for 360 clock hours of off-campus learning for 15 weeks. This course is an introduction to the clinical environment, giving students the opportunity to apply social work principles and interventions appropriate for a social work technician.

Course Pre-requisite(s)
SWK201 Group Dyna: Theories & Practic and SWK202 Family Sys: Theories & Practic

Credit Hours
8

Total Contact Hours

Total Instructor Contact Hours:
122

Total Student Contact Hours:
360

Academic Level
Undergraduate

Goals, Topics, and Objectives

Course Goals
Students will develop the knowledge and skills to work at a social work technician.

Core Course Topics

1. Professional and Ethical Behavior
2. Scope of Practice
3. Basic Social Work Skills
4. Diversity and Inclusion
5. Assessment and Referral
6. Communication Skills

Apply social work values, ethics and principles according to the NASW Code of Ethics, in interactions within the clinical setting

Practice within the scope of training and education.

Describe the environments and social service delivery practice and context in which intervention occurs.

Implement services that are appropriate to the social work technician practice.

Work, under the supervision of a licensed professional, with individuals, families, and in-group dynamics such as completing a biopsychosocial intake through oral interview and records.

Apply basic social work skills and techniques to engage, assess, and/or intervene at the micro, mezzo, and macro levels.

Work with clients who are diverse in ethnicity, culture, gender, social class, mental and physical disabilities, and sexual orientation.

Advocate for clients within a culturally competent framework.

Describe the importance of diversity in the delivery of social work services.

Utilize available community resources to assist clients based on the ecosystem, mezzo, micro, and macro.

Demonstrate professional verbal and written communication with patients and professional staff.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
The student must earn at least 70% overall in the class to earn a C grade. Grade will be based upon submission of weekly schedules, signed logs, clinical site supervisor evaluations, assignments and a final exit Interview.

Grading Scale
Grading scale for exams and the final grade:

- 98-100% = A+
- 93-97% = A
- 90-92% = A-
- 87-89% = B+
- 83-86% = B
- 80-82% = B-
- 76-79% = C+
- 70-75% = C
- 67-69% = D+
- 63-66% = D
- 60-62% = D-

- 59% & below = E

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for SWK 290

TADV060 - Basic Skills for the Skilled Trades

Overview

Subject
Skilled Trade & Apprenticeship

Academic Department
Skilled Trade and Apprentice Education

School
Business, Entrepreneurshp, PD

Course Description
Provides a comprehensive review of mathematical and algebraic skills as well as knowledge of the industrial workplace in order to prepare the student for an employer-administered apprenticeship test. Includes reading comprehension, arithmetic comprehension, spatial relations, graphic arithmetic, and mechanical concepts.

Credit Hours
4

Total Contact Hours
Total Instructor Contact Hours:
62

Total Student Contact Hours:
62

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Departmental Exam, Skilled Demonstration, Licensure/certifications, Interview

Credit for Prior College Level Learning (CPCLL) Details
Departmental Exam

Skilled Demonstration

Licensure/certifications

Interview

Goals, Topics, and Objectives

Core Course Topics
1. Workplace introduction: pre-assessment test.
2. Evaluation and test taking strategies.
3. Introduction to the competencies and technical reading.
4. Graphic arithmetic and competencies.
5. Spatial relations and competencies.
6. Mechanical concepts and competencies.
7. Assembly and competencies.
8. Troubleshooting.
9. Competencies.
10. Final Assessment
11. Evaluation

Explain the concept of graphic arithmetic.

Identify spatial relations.

Explain mechanical concepts.

Explain the concept of "assembly."

Describe the process of troubleshooting.

Describe the process of test preparation.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of academic achievement may include (but is not limited to) exams, quizzes, homework, and laboratory assignments.

Texts
Texts, handouts, and/or workbooks will be determined by the TAE department.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for TADV 060

TADV100 - Basic Print Reading

Overview

Subject
Skilled Trade & Apprenticeship

Academic Department
Skilled Trade and Apprentice Education

School
Business, Entrepreneurshp, PD

Course Description
Discusses print reading fundamentals needed for presenting concepts and techniques to various segments of today's industry. Includes the alphabet (use) of lines; projection of various shapes and surfaces; presentation of hidden details; and methods, units of measurement, and techniques used for locating details in a variety of drawings.

Credit Hours
2

Total Contact Hours
Total Instructor Contact Hours:
32

Total Student Contact Hours:
32

Course Fee
10

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Departmental Exam, Skilled Demonstration, Licensure/certifications, Interview

Credit for Prior College Level Learning (CPCLL) Details
Departmental Exam

Skilled Demonstration

Licensure/certifications

Interview

Goals, Topics, and Objectives

Core Course Topics
1. Six Areas of the Blueprint
2. Line Convensions
3. Lettering
4. Measurement Tools
5. Title Block, Parts List, and Drawing Revisions Systems
6. Multi view Drawings
7. Section Views
8. Auxiliary Views
9. Screw Thread Representation
10. Dimensioning
11. Tolerancing
12. Machining Specifications and Drawing Notes
13. Surface Texture Symbols and Drawing Revision Systems
14. Geometric Dimensioning and Tolerancing
15. Detail Drawings
16. Assembly Drawings
17. Welding Prints

Define the difference between mechanical factory/shop prints, mechanical architectural construction prints, and surveyor's prints.

Explain the size difference of prints. Read measuring scales/ micrometers.

Convert US standards to metric and decimals using conversions.

Read basic blueprints and reference various sections on prints for common questions/answers.

Use the grid systems effectively on prints.

Interpret various notes after reading the necessary information on prints.

Explain call-out tags and extra notes.

Identify different drawing views.

Interpret welding notes/instructions on blueprints.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Texts, handouts, and/or workbooks will be determined by the TAE department.

Texts
Texts, handouts, and/or workbooks will be determined by the TAE department.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for TADV 100

TADV125 - Intro to Integrated Manufacturing

Overview

Subject
Skilled Trade & Apprenticeship

Academic Department
Skilled Trade and Apprentice Education

School
Business, Entrepreneurshp, PD

Course Description
Introduces integrated manufacturing systems. Presents the technology associated with a complex integrated manufacturing system through working with the SMC-FMS-200. Discusses manufacturing processes of feeding, handling, verification, and loading operations.

Credit Hours
1

Total Contact Hours
Total Instructor Contact Hours:
16

Total Student Contact Hours:
16

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Departmental Exam, Skilled Demonstration, Licensure/certifications, Interview

Credit for Prior College Level Learning (CPCLL) Details
Competency-based hands-on lab exam based upon the project of the course

Goals, Topics, and Objectives

Core Course Topics

1. Safety in the manufacturing workplace.
2. Function of an integrated work cell.
3. Function of a programmable logic controller (PLC).
4. Typical input/output interfaces.
5. Integration of technologies.
6. Troubleshooting techniques.

Identify the safety issues associated with electrical mechanical systems.

Discuss the concepts of an integrated manufacturing system work cell.

Operate the FMS 200 work cell.

Identify PLC inputs and outputs associated with pneumatic and electrical components.

Operate a PLC successfully at a basic level of operation.

Correct machine faults.

Develop a troubleshooting flow chart that can be applied to the SMC Trainer.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of academic achievement may include (but is not limited to) exams, quizzes, homework, and laboratory assignments.

Texts
Texts, handouts, and/or workbooks will be determined by the TAE Department.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for TADV 125

TADV181 - Topics in Skilled Trades

Overview

Subject
Skilled Trade & Apprenticeship

Academic Department
Skilled Trade and Apprentice Education

School
Business, Entrepreneurshp, PD

Course Description
Provides specialized training and education in specific topics and concepts identified as relative to current maintenance issues. The precise topic or topics offered is identified by the Skilled Trades Apprenticeship Division faculty, STAD Steering Committee, employers with students enrolled in the STAD program, and/or other employers or individuals who have recognized a need for training. Course may be repeated for credit when different topics are offered.

Course Pre-requisite(s)
Department approval

Credit Hours
1

Total Contact Hours
Total Instructor Contact Hours:
18

Total Student Contact Hours:
18

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics
To be identified by the instructor

Describe the safe work practices related to the core topics, and identify at least one critical safety awareness issue related to the core topic.

Solve at least one shop mathematics problem related to the core topic.

Provide a written item that discusses the relevance of the core topic as it relates to the learners skilled trade or occupation.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
The instructor will develop the assessment process including the three Major Core Course Objectives as stated above relating to the core topic.

1. Identify one critical safety awareness issue
2. Solve at least one shop related mathematics problem
3. Provide a written item relating the core topic to the learner's occupation

General Course Requirements and Recommendations
To be determined by the instructor and approved by the ST&AD faculty and director

Texts
Texts, handouts, and/or workbooks will be determined by the Skilled Trades & Apprenticeship Department with approval by the Division.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for TADV 181

TADV182 - Special Topics in Skilled Trades

Overview

Subject
Skilled Trade & Apprenticeship

Academic Department
Skilled Trade and Apprentice Education

School
Business, Entrepreneurshp, PD

Course Description
TProvides specialized training and education in specific topics and concepts identified as relative to current maintenance issues. The precise topic or topics offered is identified by the Skilled Trades Apprenticeship Division faculty, STAD Steering Committee, employers with students enrolled in the STAD program, and/or other employers or individuals who have recognized a need for training. Course may be repeated for credit when different topics are offered.

Course Pre-requisite(s)
Department approval

Credit Hours
2

Total Contact Hours

Total Instructor Contact Hours:
32

Total Student Contact Hours:
32

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics
To be identified by the instructor

Describe the safe work practices related to the core topics, and identify at least one critical safety awareness issue related to the core topic.

Solve at least one shop mathematics problem related to the core topic.

Provide a written item that discusses the relevance of the core topic as it relates to the learners skilled trade or occupation.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
The instructor will develop the assessment process including the three Major Core Course Objectives as stated above relating to the core topic.

1. Identify one critical safety awareness issue.
2. Solve at least one shop related mathematics problem.
3. Provide a written item relating the core topic to the learner's occupation.

General Course Requirements and Recommendations
To be determined by the instructor and approved by the ST&AD faculty and director

Texts
Texts, handouts, and/or workbooks will be determined by the Skilled Trades & Apprenticeship Department with approval by the Division.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for TADV 182

TADV283 - Advanced Topics in Skilled Trades

Overview

Subject
Skilled Trade & Apprenticeship

Academic Department
Skilled Trade and Apprentice Education

School
Business, Entrepreneurshp, PD

Course Description
Provide the skilled trades community the opportunity to receive advanced specialized training and education in specific topics and concepts identified as relative to current maintenance issues. The precise topic or topics will be offered as identified by the Skilled Trades & Apprenticeship Division faculty, ST&AD Steering Committee, employers with students enrolled in the ST&AD program, and/or other employers or individuals who have recognized a need for training. Learners may repeat the course for credit when different topics are offered.

Course Pre-requisite(s)
Department approval

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics
To be identified by the instructor

Describe the safe work practices related to the core topics and identify at least one critical safety awareness issue related to the core topic.

Solve at least one shop mathematics problem related to the core topic.

Provide a written item that discusses the relevance of the core topic as it relates to the learners skilled trade or occupation.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
The instructor will develop the assessment process including the three Major Core Course Objectives as stated above relating to the core topic.

1. Identify one critical safety awareness issue
2. Solve at least one shop related mathematics problem
3. Provide a written item relating the core topic to the learner's occupation

General Course Requirements and Recommendations
To be determined by the instructor and approved by the ST&AD faculty and director

Texts
Texts, handouts, and/or workbooks will be determined by the Skilled Trades & Apprenticeship Department with approval by the Division.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for TADV 283

TAEL103 - DC and AC Electricity

Overview

Subject
Skilled Trade & Apprenticeship

Academic Department
Skilled Trade and Apprentice Education

School
Business, Entrepreneurshp, PD

Course Description
Introduces DC and AC electrical theory, including electrical definitions, units of electrical measure, series and parallel resistive circuits, capacitance, inductance, AC voltage measurements, and AC calculations. Explores usage of meters and oscilloscopes.

Credit Hours
4

Total Contact Hours
Total Instructor Contact Hours:
62

Total Student Contact Hours:
62

Course Fee
15

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Departmental Exam, Other Exam, Skilled Demonstration, Licensure/certifications, Interview

Credit for Prior College Level Learning (CPCLL) Details
Departmental Exam

Other Exam

Skilled Demonstration

Licensure/certifications

Interview

Goals, Topics, and Objectives

Core Course Topics

1. Introduction and Classroom Organization
2. Static Electricity
3. Resistors
4. Series Resistive Circuits
5. Parallel Resistive Circuits
6. Series and Parallel Combination Circuits
7. Measuring Instruments
8. Wire Tables and Conductor Sizes
9. Conduction in Liquid and Gases
10. Alternating Current
11. Magnetic Induction
12. Switch Contact Configurations

Describe the concepts of basic electrical theory and define the terms voltage, current, resistance, and power.

Demonstrate the use of Ohm's Law and Power calculations in an electrical circuit.

Complete electrical measurements using electrical test equipment.

Describe the concepts of series and parallel circuits and explain the differences between concepts.

Calculate series and parallel circuit values.

Describe the concepts of capacitance and inductance.

Describe the concept of AC theory and be able to differentiate it from DC.

Demonstrate a working knowledge of how conductor size and type affect the flow of current and able to calculate proper conductor size in a circuit.

Calculate line loss in an electrical conductor.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Methods for measuring achievement of objectives may include, but are not limited to:

1. Quizzes / Tests
2. Laboratory Activities
3. Mid-Term Exam
4. Final Exam

Texts
Texts, handouts, and/or workbooks will be determined by the TAE Department.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for TAEL 103

TAEL105 - AC Theory and Equipment

Overview

Subject
Skilled Trade & Apprenticeship

Academic Department
Skilled Trade and Apprentice Education

School
Business, Entrepreneurshp, PD

Course Description
Examines alternating current theory. Includes right triangle trigonometry and complex numbers to facilitate the AC calculations. Discusses concepts of reactance, impedance, and power factor. Compares single phase and three phase power. Introduces single phase and three phase alternators, motors, transformers, and both heating and lighting loads.

Course Pre-requisite(s)
TAEL103 DC & AC Electricity or Instructor Permission

Credit Hours
4

Total Contact Hours
Total Instructor Contact Hours:
62

Total Student Contact Hours:
62

Course Fee
15

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. AC Volatage Measurements and Calculations
2. Right Triangle Trigonometry
3. Inductive and Capacitive Reactance
4. Series RL and RC Circuits
5. Series RLC Circuits, Complex Numbers, & Oscilloscope Measurements
6. Series and Parallel RLC Circuits
7. Resonant Circuits
8. Power Factor
9. Inductive and Resistive Loads, & Power Factor Correction
10. Single-Phase Transformers
11. Three-Phase Voltage Concepts
12. Delta and Wye Distribution
13. Three-Phase Transformers
14. AC Equipment and Loads

Describe the concepts of AC theory and be able to differentiate it from DC.

Calculate RMS, Peak, Average, and Peak to Peak AC voltage.

Define the concepts of reactance and impedance.

Calculate reactance and impedance in an AC circuit.

Utilize right triangle trig and complex numbers in AC voltage calculations.

Describe the difference between three phase voltage and single phase voltage and be able to do three phase Delta and Wye calculations.

Wire single phase and three phase transformers in the laboratory.

Calculate the power factor for an AC circuit and be able to accomplish power factor correction in an AC circuit.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Methods for measuring achievement of objectives:

1. Tests will be given throughout the semester. Tests scores represent 65% of the course grade.
2. Laboratory activities and performance exercises will be done where students will demonstrate an understanding of practical applications. These will make up 10% of the course grade.
3. A written final exam will be given which will represent 25% of the course grade.

Texts
Texts, handouts, and/or workbooks will be determined by the TAE Department.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for TAEL 105

TAEL106 - Electronics Theory

Overview

Subject
Skilled Trade & Apprenticeship

Academic Department
Skilled Trade and Apprentice Education

School
Business, Entrepreneurshp, PD

Course Description
Stresses the fundamental theories of electronic components and elementary semi-conductor circuit applications. Covers power supplies, amplifiers, oscillators, and semi-conductor controls. Includes use of test equipment, including oscilloscopes and meters.

Course Pre-requisite(s)
TAEL103 DC & AC Electricity or Instructor Permission

Credit Hours
4

Total Contact Hours

Total Instructor Contact Hours:
62

Total Student Contact Hours:
62

Course Fee
20

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Semiconductor Theory
2. Semiconductor Diodes
3. Power Supplies
4. Voltage Regulators
5. Transistors Chapter 6
6. Transistor Amplifiers
7. FETs and Multi-Stage Amplifiers
8. Power Amplifiers
9. Operational Amplifiers
10. SCRs,TRIACs, DIACs, and UJTs
11. Solid State Transducers
12. Electronic Circuit Repair
13. Electronic Circuit Repair

Describe how semiconductors function.

Describe the function of semiconductor circuits including power supplies, amplifiers, oscillators, and semiconductor switching circuits.

Explain the process of rectification.

Draw schematics for half wave and bridge power supply circuits and then be able to construct these circuits in the laboratory.

Calculate the output voltage for a half wave and bridge power supply.

Explain the process of amplification.

Draw a schematic for a transistor amplifier and construct this circuit in the laboratory.

Use electronic test equipment properly in the laboratory to test electronic circuits assembled in the laboratory.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Methods for measuring achievement of objectives:

1. Tests will be given throughout the semester. Tests scores represent 50% of the course grade.
2. Laboratory activities and performance exercises will be done where students will demonstrate an understanding of practical applications. These will make up 25% of the course grade.
3. A written final exam will be given which will represent 25% of the course grade.

Texts
Texts, handouts, and/or workbooks will be determined by the TAE Department.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for TAEL 106

TAEL115 - Digital Theory

Overview

Subject
Skilled Trade & Apprenticeship

Academic Department
Skilled Trade and Apprentice Education

School
Business, Entrepreneurshp, PD

Course Description
Covers digital theory. Introduces basic gates and logic circuits, counters, registers, timers, LED and LCD displays, arithmetic circuits, and number systems. Laboratory activities.

Course Pre-requisite(s)
TAEL103 DC & AC Electricity or Instructor Permission

Credit Hours
2

Total Contact Hours

Total Instructor Contact Hours:
32

Total Student Contact Hours:
32

Course Fee
20

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Digital concepts and number systems
2. Gates
3. Logic circuits
4. Logic circuit lab
5. CMOS and TTL specifications
6. Encoders / decoders and seven segment displays
7. Flip flops
8. Counters
9. Shift registers
10. Shift registers with lab component
11. Binary math - arithmetic curcuits
12. Arithmetic Circuits

Demonstrate a working knowledge of the Binary, Octal, Hexadecimal, and Decimal number systems and be able to convert any of these number systems into any of the other three.

Describe the functioning of digital gate circuits.

Demonstrate a working knowledge of Boolean algebra and be able to translate Boolean expressions into functional gate circuits.

Describe the functionality of the following digital circuits: counters, registers, adders, subtractors, and digital display circuits.

Construct the following digital circuits: counters, registers, adders, subtractors, and digital display circuits.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Methods for measuring achievement of objectives:

1. Tests will be given throughout the semester. Tests scores represent 65% of the course grade.
2. Laboratory activities and performance exercises will be done where students will demonstrate an understanding of practical applications. These will make up 10% of the course grade.
3. A written final exam will be given which will represent 25% of the course grade.

Texts
Texts, handouts, and/or workbooks will be determined by the TAE Department with approval by the Industrial Technology Division.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for TAEL 115

TAEL145 - DC and AC Motors

Overview

Subject
Skilled Trade & Apprenticeship

Academic Department
Skilled Trade and Apprentice Education

School
Business, Entrepreneurshp, PD

Course Description
Covers DC and AC motor fundamentals. Includes DC generators; series, shunt, and compound DC motors; single-phase and three-phase AC induction motors; and synchronous, wound rotor, and universal motors. Compares AC alternators to DC generators.

Course Pre-requisite(s)
TAEL105 AC Theory & Equipment or Instructor Permission

Credit Hours
4

Total Contact Hours

Total Instructor Contact Hours:
62

Total Student Contact Hours:
62

Course Fee
15

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Introduction to D.C. motors and D.C. generators
2. Fundamentals of the D.C. generator
3. Generator characteristics
4. Load characteristics of a shunt and compound D.C. generator
5. Effect of speed on shunt generators
6. Load characteristics of a self-excited shunt and compound generator
7. Counter E.M.F. of a D.C. motor / motor torque and horsepower
8. Fundamental motor equation
9. D.C. motor characteristics and loading effects
10. D.C. shunt motor and series motor loading conditions
11. Introduction to single-phase transformers
12. Coil polarities and transformer ratios
13. Single-phase transformer relationships
14. Transformer open- and short-circuit tests, single-phase transformer efficiency
15. Three-phase transformers
16. Delta & Wye configurations
17. Transformer three-phase – open Delta connection
18. Three-phase transformer loads
19. Power factor correction
20. Three-phase transformer problems
21. Three-phase (poly-phase) induction motor – squirrel cage
22. Three-phase induction motor characteristics and performance
23. Load characteristics of the squirrel cage induction motor
24. Starting and running characteristics of a squirrel cage induction motor
25. Running characteristics of the three-phase squirrel cage motor (no-load condition, locked rotor test, loaded condition)
26. Determining starting torque using locked rotor method of squirrel cage motor
27. Starting characteristics of the squirrel cage induction motor
28. Three-phase motors and circuit conditions

Describe how DC motors and DC generators functionally operate.
Operate DC motors and generators successfully in the laboratory.
Describe how AC alternators operate.
Operate an AC alternator successfully in the laboratory.
Describe how three phase and single phase induction motors operate.
Operate AC motors successfully in the laboratory.
Calculate motor losses and state the efficiency of an AC inductor motor.
Describe how synchronous and wound-rotor induction motors operate.
Operate synchronous and wound-rotor motors successfully in the laboratory.
Describe how universal motors operate.
Operate universal motors successfully in the laboratory.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Methods for measuring achievement of objectives:

1. Tests will be given throughout the semester. Tests scores represent 55% of the course grade.
2. Laboratory activities and performance exercises will be done where students will demonstrate an understanding of practical applications. These will make up 20% of the course grade.
3. A written final exam will be given which will represent 25% of the course grade.

Texts
Texts, handouts, and/or workbooks will be determined by the TAE Department.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for TAEL 145

TAEL200 - Ladder Diagrams & Motor Controls

Overview

Subject
Skilled Trade & Apprenticeship

Academic Department
Skilled Trade and Apprentice Education

School
Business, Entrepreneurshp, PD

Course Description
Discusses the fundamentals of electrical ladder diagrams and motor control circuits. Covers ladder logic, labels, documentation, symbology of electrical drawings, and the use of ladder diagrams for troubleshooting. Examines several single phase control circuits, and explores how to design and draw control circuits for three-phase induction motors.

Course Pre-requisite(s)
TAEL145 DC and AC Motors or Instructor Permission

Credit Hours
4

Total Contact Hours
Total Instructor Contact Hours:
62

Total Student Contact Hours:
62

Course Fee
15

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Electrical tools, instruments, and safety.
2. Electrical symbols and line diagrams.
3. Ladder logic and line diagrams.
4. AC manual contactors and motor starters.
5. Magnetism and magnetic solenoids.
6. AC contactors and magnetic motor starters.
7. Forward and reversing starters.
8. Time delay devices.
9. Complex line diagrams and control devices.
10. Plugging and anti-plugging.
11. AC reduced voltage starters.
12. Solid state electronic controls.
13. Multi-speed motor controls.
14. Single-phase starters and reversing circuits.
15. Single phase multi-speed circuitism.

Demonstrate a clear understanding of electrical tools, instruments, and electrical safety procedures.

Read and correctly draw electrical ladder diagrams and recognize all electrical symbols.*

Troubleshoot electrical circuits using electrical ladder diagrams.

Describe and apply the concepts of motor starters and physically wire a manual motor starter circuit.

Demonstrate knowledge of magnetic contactors and solenoids and wire them into electrical control circuits.

Describe the operation of a magnetic motor starter circuit and successfully wire a magnetic starter.

Describe the following concepts utilized in three phase AC motor control circuits and be able to implement them in the lab: forward and reverse starting, plugging and anti-plugging, multi-speed operation, and braking circuits.

Describe the concept of reduced voltage starters.

Compare three phase motor control circuits to single phase motor control circuits and be able to wire single phase motor control circuits.

Demonstrate knowledge of electrical timers by applying them in electrical control circuits.

Perform application of industrial electronic control circuits.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Methods for measuring achievement of objectives:

1. Tests will be given throughout the semester. Tests scores represent 35% of the course grade.
2. Laboratory activities and performance exercises will be done where students will demonstrate an understanding of practical applications. These will make up 35% of the course grade.
3. A written final exam will be given which will represent 30% of the course grade.

Texts
Texts, handouts, and/or workbooks will be determined by the TAE Department.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for TAEL 200

TAEL235 - Siemens PLC/HMI Programming

Overview

Subject
Skilled Trade & Apprenticeship

Academic Department
Skilled Trade and Apprentice Education

School
Business, Entrepreneurshp, PD

Course Description
This course addresses Siemens PLC's and HMI's from both a hardware and software perspective. The student builds on the information discussed and learns both programming and troubleshooting skills through both lecture and lab situations.

Course Pre-requisite(s)
TAEL200 Ladder Diagrams & Control or Instructor permission

Credit Hours
4

Total Contact Hours
Total Instructor Contact Hours:
62

Total Student Contact Hours:
62

Course Fee
10

Academic Level
Undergraduate

Goals, Topics, and Objectives

Course Goals
To prepare the student to program, maintain and troubleshoot a Siemens PLC/HMI PLC system.

Core Course Topics

1. Hardware and software introduction
2. The Scan Cycle
3. STOP, STARTUP, and RUN mode
4. Data Types
5. Project and Portal Views
6. Downloading/Uploading programs
7. Input and Output Addresses
8. Methods of Adding an HMI Panel
9. HMI and PLC Tags

Demonstrate proficiency in entry-level PLC programming.

Design a Siemens PLC program to solve various control problems.

Construct a useable HMI interface to allow a user the ability to operate various parameters.

Evaluate a Siemens program and determine how it operates.

Troubleshoot a non-functioning Siemens PLC program.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of student achievement may include lab assignments, quizzes, and exams.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for TAEL 235

TAEL245 - Programmable Logic Controllers (plc)

Overview

Subject
Skilled Trade & Apprenticeship

Academic Department
Skilled Trade and Apprentice Education

School
Business, Entrepreneurshp, PD

Course Description
Discusses Allen Bradley PLC-5/25 programmable controller system characteristics. Covers how to use the programmable controller to solve the automated control problem and how to adapt to any PLC system, regardless of the manufacturer. Major course work involves writing several PLC programs and then successfully executing the programs in a laboratory setting.

Course Pre-requisite(s)
TAEL200 Ladder Diagrams & Control or Instructor Permission

Credit Hours
4

Total Contact Hours
Total Instructor Contact Hours:
62

Total Student Contact Hours:
62

Course Fee
15

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Programmable logic controller (PLC-5) fundamentals.
2. Data table configuration.
3. Input and output hardware connections.
4. Input and output programming commands.
5. Bit storage, timer, and counter concepts.
6. PLC programming concepts.
7. Pneumatic air logic and components.
8. PLC troubleshooting.

Describe the applications of a Programmable Logic Controller (PLC) and how it is part of an automation system.

Write a simple PLC program that includes input to output statements, counters, and timers.

Interface a PLC to basic electrical equipment.

Enter and execute a PLC program from a computer terminal.

Prepare and organize a machine control package used to emphasize the importance of graphical communication.

Solve a control problem utilizing the logical capability of the PLC.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Methods for measuring achievement of objectives:

1. Two written tests will be given during the semester. Both of these tests will be graded on a Pass/Fail basis and must be successfully passed to pass the class. Students may retake the test until a passing score is achieved.
2. Group laboratory activities and performance exercises are done in which students demonstrate an understanding of assigned circuits.
3. Six programming assignments will be completed and executed in the laboratory. If four are successfully completed along with the quizzes and group labs, a grade of C will be earned. If five are completed, then the grade will be a B. If all six programming assignments are completed, then the student will receive an A.

Texts
Texts, handouts, and/or workbooks will be determined by the TAE Department.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for TAEL 245

TAEL260 - Automation Controls and Robotics

Overview

Subject
Skilled Trade & Apprenticeship

Academic Department
Skilled Trade and Apprentice Education

School
Business, Entrepreneurshp, PD

Course Description
An advanced-level course on the programmable controller. Discusses techniques, terminology, and documentation currently used in automated manufacturing. Emphasizes how to write control specifications for laboratory automation machines and industrial robots which are then used to implement controls for non-synchronous and synchronous operation of the machines.

Course Pre-requisite(s)
TAEL245 Program Logic Controller or Instructor Permission

Credit Hours
4

Total Contact Hours
Total Instructor Contact Hours:
62

Total Student Contact Hours:
62

Course Fee
15

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. PLC 5 software.
2. Addressing PLC 5 files, elements, and bits.
3. Using the ladder editor.
4. Symbolic addressing.
5. Timers and counters.
6. Writing a ladder logic program.
7. Shift register.
8. Sequencer instruction.
9. Use of the FAL instruction.
10. Six laboratory exercises to demonstrate competencies

Interface the PLC to a wide variety of industrial equipment.

Write a complex PLC program that includes input to output statements, counters, timers, shift registers, and sequencers.

Program shift registers to track moving parts on a rotary indexing table and a lift and transfer machine.

Program sequencers on a variety of pick and place machines.

Write programs that use 6200 and RSLogix software to control a variety of machine processes.

Troubleshoot programs while the machine is in the test/run mode.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Methods for measuring achievement of objectives:

1. Informal and formal laboratory activities are completed by the students. Performance exercises allow the students to demonstrate an understanding of assigned circuits. Formal laboratory activities are submitted as a written report and represent 80 percent of the course grade.
2. A final laboratory project will be completed by all students. This final project will represent 20 percent of the course grade.

Texts
Texts, handouts, and/or workbooks will be determined by the TAE Department.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for TAEL 260

TAEL265 - National Electrical Code

Overview

Subject
Skilled Trade & Apprenticeship

Academic Department
Skilled Trade and Apprentice Education

School
Business, Entrepreneurshp, PD

Course Description
This course covers the pertinent aspects of Chapters 1 through 4 of the 2017 National Electrical Code (NEC) as they apply to electrical examinations and installations in all types of buildings and structures covered by the Code. Also covered are essential rules of the Skilled Trades Regulation Act 407 of 2016 and the 2017 Michigan Electrical Code Rules Part 8. The course content is disseminated by lecture utilizing PowerPoint presentations.

Course Pre-requisite(s)
TAEL103 DC & AC Electricity: DC & AC Theory

Credit Hours
2

Total Contact Hours
Total Instructor Contact Hours:
32

Total Student Contact Hours:
32

Course Fee
3

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics
1. Introduction to the National Electric Code.
2. Branch circuits and feeders.
3. Calculations for branch circuits and feeders.
4. Services and grounding.
5. Wiring methods and conductors.
6. Lighting fixtures and receptacles.
7. Motors.
8. Transformers.

Explain the significance of the National Electrical Code and how it governs electrical work.

Describe branch and feeder circuits and work branch and feeder circuit calculations.

Define over-current protection.

Describe a proper service installation and explain the grounding of the service.

Describe proper wiring methods.

Calculate proper conductor sizes.

Describe proper installation of lighting fixtures and receptacles.

Describe proper installation of transformers.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
1. Tests will be given throughout the semester. Tests represent 30% of the course grade.
2. A mid-term exam will be given which will represent 30% of the course grade.
3. A final exam will be given which will represent 40% of the course grade

Texts
Texts, handouts, and/or workbooks will be determined by the TAE Department.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for TAEL 265

TAEL273 - Fire Alarm Systems for Electricians

Overview

Subject
Skilled Trade & Apprenticeship

Academic Department
Skilled Trade and Apprentice Education

School
Business, Entrepreneurshp, PD

Course Description
Provides an overview of fire alarm systems. Reviews fire alarm system requirements from the International Building Code and the National Fire Protection Association (NFPA) 72 Standard for fire alarm and signaling systems. Discusses the basics of detection, notification, suppression, and cabling requirements for residential and commercial applications.

Course Pre-requisite(s)
TAEL103 DC & AC Electricity: DC & AC Theory

Credit Hours
1

Total Contact Hours
Total Instructor Contact Hours:
16

Total Student Contact Hours:
16

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics
1. Fire alarm systems.
2. Fire detection.
3. Fire notification.
4. Fire suppression.
5. Detecting devices.
6. National Electrical Code standards.
7. NICET Requirements.

Compare and contrast basic fire alarm terms: Detection, Notifcation, and Suppression.

Analyze Building Code requirements for Fire Alarm systems.

Identify various types of detection devices.

Identify various types of notifcation appliances.

Classify suppression components.

Explain basic wiring methods per National Fire Protection Association (NFPA) 72 and National Electrical Code (NEC) standards.

Explain system testing and acceptance requirements.

Explain National Institute for Certification in Engineering Technologies (NICET) requirements.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
1. Tests will be given throughout the semester. Tests represent 30% of the course grade.
2. A mid-term exam will be given which will represent 30% of the course grade.
3. A final exam will be given which will represent 40% of the course grade

Texts
Texts, handouts, and/or workbooks will be determined by the TAE Department.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for TAEL 273

TAEL275 - Residential Wiring

Overview

Subject
Skilled Trade & Apprenticeship

Academic Department
Skilled Trade and Apprentice Education

School
Business, Entrepreneurshp, PD

Course Description
Course explores the history and fundamentals of residential wiring including the inspectors perspective, and the aspects of the National Electrical Code (NEC) that apply to residential construction and repairs. Electrical supplies, hardware and their associated wiring techniques for residential applications are explained. The method of instruction is classroom lecture utilizing PowerPoint.

Course Pre-requisite(s)
TAEL103 DC & AC Electricity: DC & AC Theory

Credit Hours
2

Total Contact Hours

Total Instructor Contact Hours:
32

Total Student Contact Hours:
32

Course Fee
10

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Introduction to Residential Wiring and the National Electric Code
2. Branch circuits and feeders.
3. General lighting branch circuits.
4. Small appliance circuits.
5. Speciality circuits.
6. Calculations for branch circuits and feeders.
7. Services & grounding.
8. Feeder panels.
9. Service calculations (including short-circuit calculations).
10. Wiring heating units and air conditioning.
11. Wiring motors and transformers.
12. Low voltage wiring.
13. Wiring garages, outbuildings, swimming pools and spas.
14. Putting it all together & estimating.

Explain the significance of the National Electrical Code and how it governs electrical work.

Describe branch and feeder circuits.

Calculate branch and feeder currents.

Describe proper installation of lighting fixtures and receptacles.

Describe proper installation of small appliance circuits.

Describe proper installation of specialty circuits.

Describe a proper service installation and explain the grounding of the service.

Explain proper installation of heating and air conditioning circuits.

Explain proper installation of motors and transformers.

Explain proper installation of low voltage wiring.

Explain proper wiring of garages, outbuildings, swimming pools, and spas.

Estimate the cost of an electrical wiring project.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement

1. Tests will be given throughout the semester. Tests represent 30% of the course grade.
2. A mid-term exam will be given which will represent 30% of the course grade.
3. A final exam will be given which will represent 40% of the course grade.

Texts
Texts, handouts, and/or workbooks will be determined by the TAE Department.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for TAEL 275

TAEL276 - Commercial Wiring

Overview

Subject
Skilled Trade & Apprenticeship

Academic Department
Skilled Trade and Apprentice Education

School
Business, Entrepreneurshp, PD

Course Description
Covers the fundamentals of commercial wiring, especially the aspects of the National Electrical Code that specifically apply to commercial construction and repairs. Discusses electrical supplies, hardware appropriate for commercial applications, and commercial wiring techniques. The method of instruction is classroom lecture utilizing PowerPoint presentations.

Course Pre-requisite(s)
TAEL103 DC & AC Electricity: DC & AC TheoryTAEL105 AC Theory & Equipment: AC Theory & Equipment

Credit Hours
2

Total Contact Hours

Total Instructor Contact Hours:
32

Total Student Contact Hours:
32

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Commercial blueprint reading.
2. Commercial branch circuit distribution.
3. Electrical grounding in commercial applications.
4. Motor controls in commercial equipment.
5. Overcurrent protection in commercial wiring (fuses, circuit breakers, ground fault protection).
6. Conductor sizing.
7. Power factor correction.

Explain the significance of the National Electrical Code and how it governs commercial installations.

Identify the functions and components of a unit substation.

Describe the components of a busway and its methods of support.

Explain the different types of wire insulation and their applications.

Use the appropriate wire table to determine conductor sizes.

Determine the ampere rating of various motors using the NEC.

Define and use the concept of power factor.

Describe the operation of circuit breakers, fuses, and ground-fault protective devices.

List the important considerations in lamp selection for site lighting.

Identify the different classes, divisions, and groups of hazardous locations.

Troubleshoot a circuit fault utilizing electrical drawings.

Lay out an commercial installation utilizing electrical drawings.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement

1. Tests will be given throughout the semester. Tests represent 30% of the course grade.
2. A mid-term exam will be given which will represent 30% of the course grade.
3. A final exam will be given which will represent 40% of the course grade.

Texts
Texts, handouts, and/or workbooks will be determined by the TAE Department.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for TAEL 276

TAEL277 - Industrial Wiring

Overview

Subject
Skilled Trade & Apprenticeship

Academic Department
Skilled Trade and Apprentice Education

School
Business, Entrepreneurshp, PD

Course Description
Introduces the fundamentals and techniques of industrial wiring. Emphasizes aspects of the National Electrical Code specifically applying to industrial applications and repairs. Includes electrical supplies and hardware appropriate for industrial applications.

Credit Hours
2

Total Contact Hours

Total Instructor Contact Hours:
32

Total Student Contact Hours:
32

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Industrial blueprint reading.
2. Industrial branch circuit distribution.
3. Electrical grounding in industrial applications.
4. Motor controls in industrial equipment.
5. Overcurrent protection in industrial wiring (circuit breakers, fuses, ground fault protection).
6. Conductor sizing.
7. Power factor.
8. Wire tables.
9. Lighting.

Explain the significance of the National Electrical Code and how it governs industrial installations.

Identify the functions and components of a unit substation.

Describe the components of a busway and its methods of support.

Explain the different types of wire insulation and their applications.

Use the appropriate wire table to determine conductor sizes.

Determine the ampere rating of various motors using the NEC.

Define and use the concept of power factor.

Describe the operation of circuit breakers, fuses, and ground-fault protective devices.

List the important considerations in lamp selection for site lighting.

Identify the different classes, divisions, and groups of hazardous locations.

Troubleshoot a circuit fault utilizing electrical drawings.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement

1. Tests will be given throughout the semester. Tests represent 30% of the course grade.
2. A mid-term exam will be given which will represent 30% of the course grade.
3. A final exam will be given which will represent 40% of the course grade

Texts
Texts, handouts, and/or workbooks will be determined by the TAE Department.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for TAEL 277

TAEL280 - Low Voltage & Communication Wiring

Overview

Subject
Skilled Trade & Apprenticeship

Academic Department
Skilled Trade and Apprentice Education

School
Business, Entrepreneurshp, PD

Course Description
Covers installation and maintenance of signal/low voltage wiring and signal transmission, including PC board, and fiber optic repair and maintenance. Cover troubleshooting, installation procedures, and repair techniques in a lab setting. Emphasizes safety procedures and protocols.

Course Pre-requisite(s)
TAEL105 AC Theory & Equipment or Instructor Permission

Credit Hours
2

Total Contact Hours

Total Instructor Contact Hours:
32

Total Student Contact Hours:
32

Course Fee
20

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Voltage and Power Loss in Lines
2. High Frequency AC Lines
3. Decibel Calculations
4. Wavelength and Standing Wave Reflections
5. Coax Cable and Twisted Pairs
6. Fiber Optic Cable
7. Fiber Optics
8. Telephone and Voice Communication
9. Current Loops and Sensors
10. Computer Networks

Calculate voltage loss in transmission cables.

Calculate AC signal loss and express it in decibels.

Read and interpret basic schematics and wiring diagrams, and use them to wire equipment.

Apply safe and proper methods in using tools.

Identify several types of copper cable and describe the proper use and installation of this cable.

Describe proper uses of shielding and grounding.

Identify several types to fiber optic cable and describe the proper use and installation of this cable.

Explain the function of a current loop circuit.

Explain the functioning of a telephone circuit.

Explain the functioning of RF communication circuits.

Identify proper methods of installation for coax cable and twisted pair.

Analyze typical computer networks.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement

1. Tests will be given throughout the semester. Tests represent 65% of the course grade.
2. A mid-term exam will be given which will represent 10% of the course grade.
3. A final exam will be given which will represent 25% of the course grade

Texts
Texts, handouts, and/or workbooks will be determined by the TAE Department.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for TAEL 280

TAEL290 - High Voltage Power Distribution

Overview

Subject
Skilled Trade & Apprenticeship

Academic Department
Skilled Trade and Apprentice Education

School
Business, Entrepreneurshp, PD

Course Description
Covers the generation, transmission, and distribution of primary electrical power. Includes underground and overhead distribution systems, types of wire and cables, switching equipment, protective devices, test equipment, personal safety items, OSHA safety rules, and methods of providing protection when working on de-energized electrical equipment.

Course Pre-requisite(s)
ELEC103 Basic Electricity or ENT-103 orTAEL103 DC & AC Electricity or Instructor Permission

Credit Hours
2

Total Contact Hours
Total Instructor Contact Hours:
32

Total Student Contact Hours:
32

Course Fee
3

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Overview - high voltage power.
2. OSHA safety rules & personal safety equipment.
3. Generation and transmission of power.
4. Substations.
5. Substation equipment and maintenance.
6. Overhead lines.
7. Underground distribution.
8. High voltage test equipment.
9. High voltage rubber safety equipment.
10. Electrical print reading and documentation.
11. Switching, tagging, and documentation.
12. Troubleshooting - isolation and correction of faults.
13. Ground faults - identification and isolation.
14. Review - OSHA safety requirements.

Explain the concepts of electrical power generation, transmission, and distribution.

Explain OSHA high voltage safety procedures and identify high voltage safety equipment.

Explain the function of a substation.

Identify substation equipment and explain substation maintenance procedures.

Explain how power is distributed using overhead lines.

Explain how power is distributed using underground cables.

Identify high voltage electrical test equipment and explain the proper use of this equipment.

Read an electrical print.

Explain the concepts of lock-out, switching, and tagging, and the proper documentation needed when working on high voltage equipment.

Identify common electrical faults, and explain how they can be isolated utilizing appropriate test equipment.

Identify ground faults and explain how they can be isolated.

Generate a flow chart illustrating troubleshooting methodology.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Tests will be given throughout the semester. Tests represent 75% of the course grade. A final exam will be given which will represent 25% of the course grade.

Texts
Texts, handouts, and/or workbooks will be determined by the TAE Department.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for TAEL 290

TAEL291 - Elec Power Distribution & Transmission

Overview

Subject
Skilled Trade & Apprenticeship

Academic Department
Skilled Trade and Apprentice Education

School
Business, Entrepreneurshp, PD

Course Description
Covers the fundamentals of electrical power distribution, including substation and transmission line protection as well as construction. Also examines transmission lines, operation of distribution transformers, instrument transformers, circuit breakers, reclosers, sectionalizers, fuses, relays, and disconnects.

Credit Hours
2

Total Contact Hours
Total Instructor Contact Hours:
32

Total Student Contact Hours:
32

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Introduction to Electrical Power
2. Basic Concepts, Three Phase Review
3. Electrical Power Distribution
4. Distribution Transformers
5. Instrument Transformers and Voltage Line Drops
6. Circuit Breakers
7. Reclosers, Sectionalizers, Fuses
8. Relays and Disconnects
9. Electrical Power Transmission
10. Transmission Line Protection
11. Transmission Line Construction

Identify the different types of transformers used in a substation and their purpose in electrical power distribution.

Identify the different types of circuit breakers and fuses employed in a substation distribution system.

State how electrical power is transmitted and distributed including line protection devices.

Describe the different types of transmission line constructions used.

Explain the operation of a substation, its layout, and construction methods.

Explain how a substation is protected against faults.

Describe the application and relative ratings of reclosers and sectionalizers.

Identify and explain the operation of the different types of relays and disconnects used in a substation.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement

1. Tests will be given throughout the semester. Tests represent 65% of the course grade.
2. Laboratory activities and performance exercises will be done where students will demonstrate an understanding of practical applications. These will make up 10% of the course grade.
3. A final exam will be given which will represent 25% of the course grade

Texts
Texts, handouts, and/or workbooks will be determined by the TAE Department.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for TAEL 291

TAFD117 - Industrial Computer Applications

Overview

Subject
Skilled Trade & Apprenticeship

Academic Department
Skilled Trade and Apprentice Education

School
Business, Entrepreneurshp, PD

Course Description
Introduces computer systems and associated components typically found in the industrial environment. Presents basic skills in word processing, database, spreadsheet, email, specialized vendor software, and communication software. Also covers Internet and Intranet environments, including searching for industry manuals and parts, downloading software and drivers, and other related tasks. Utilizes the Windows operating system in conjunction with proprietary software. Discusses the HFC learning management systems. Laboratory activities.

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
77

Total Student Contact Hours:
77

Academic Level
Undergraduate

General Education Category
Computer Technology

Goals, Topics, and Objectives

Core Course Topics

1. Course overview
2. Computer basics
3. Input and output devices
4. Processing and storage
5. Computer security and protection
6. Computer ergonomics
7. Software installation
8. File management
9. Peripheral devices
10. Overview of computer applications
11. Word processing software
12. Spreadsheet software
13. Presentation software
14. Database software
15. Email management systems
16. Communication software
17. Internet basics
18. Web browser and search tools
19. Electronic data sheets
20. Computer programming
21. CAD/CAM software
22. Simulation software

Describe the history of computers from the abacus to Zenith.

Explain the basic calculator functions including addition, subtraction, multiplication, division, and scientific notation.

Identify and explain the function and use of the keys on a standard keyboard. Identify, explain, and use the elementary personal computer commands.

Identify and use peripheral computer hardware.

Identify the different operating systems; i.e. machine language, DOS, and Windows.

Explain the function and use of data storage systems and their components.

Identify and use data storage media, including Cloud storage.

Prepare, save, and retrieve documents utilizing word processing, spreadsheets, data bases, and computer graphics software programs.

Demonstrate rudimentary computer programming with proprietary software.

Demonstrate the use of an elementary CAD program with proprietary software.

Demonstrate verbal and written communication skills through class presentations and written reports.

Utilize and maintain a weekly log or journal of all course activities.

Utilize and maintain a personal spreadsheet to track course progress.

Utilize the intranet to send and receive assigned and personal emails.

Utilize a web browser to access information from the Internet.

Utilize simulation software to introduce the AMTEC integrated manufacturing system trainer.

Utilize individual and group problem solving skills to work through class projects.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
The final grade for this course will consist of an accumulation of grades and scores earned on various projects during the semester. They are as follows:

1. Weekly Competencies = 40%
2. AMTEC Curriculum = 25%
3. Worksheets = 10%
4. Internet Assignments = 10%
5. Shop Talks = 5%
6. Shop Memos = 5%
7. Class Journal = 5%

Texts
Texts, handouts, and/or workbooks will be determined by the TAE Department.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for TAFD 117

TAFD120 - Industrial Safety Awareness

Overview

Subject
Skilled Trade & Apprenticeship

Academic Department
Skilled Trade and Apprentice Education

School
Business, Entrepreneurshp, PD

Course Description
Presents a comprehensive approach to safety, designed to give the skilled tradesperson the knowledge of safety fundamentals and practices, from the causes of accidents to the study of safety hazards and rules associated with equipment and tools utilized in modern industrial facilities. Successful completers will be issued the Occupational Safety and Health Administration (OSHA) 30-Hour card for General Industry.

Credit Hours
2

Total Contact Hours
Total Instructor Contact Hours:
32

Total Student Contact Hours:
32

Course Fee
15

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Introduction to OSHA
2. The Occupational Safety and Health Act (OSHA)
3. The General Duty Clause
4. OSHA Inspections, Citations, and Penalties, OSHA Record Keeping
5. MIOSHA, Safety Rights and Responsibilities.
6. Hazard Communication and the SDS
7. Asbestos Awareness
8. Flammable and Combustible Liquids, Cylinder Safety and HAZWOPER
9. Machine Guarding and Workplace Security
10. Personal Protective Equipment
11. Lock-out/Tag-out
12. Permit Required Confined Space Entry
13. Electrical Safety and Arc Flash Safety
14. Hand and Power Tool Safety
15. Welding and Laser Safety
16. Safety and Health Programs
17. Walking and Working Surfaces, Ladder and Scaffold Safety, Fall Protection
18. Hoists, Cranes, and Materials-Handling Equipment
19. Means of Egress , Fire Safety, Violence in the Workplace
20. Industrial Hygiene, Ergonomics, and Blood Borne Disease Transmission

Explain the purpose and function of the Occupational Health and Safety Administration (OSHA).

Explain the purpose and function of the Michigan Occupational Health and Safety Administration (MIOSHA).

Identify and explain safety rights and responsibilities of employers and employees.

Identify and explain hazard communication standards.

Demonstrate the basics of machine shop safety including lock-out and tag-out.

Explain electrical safety, power- and hand-tool safety, equipment safety, and machine guarding.

Identify and explain basic health safety issues including occupational stress.

Explain the basics of confined space entry.

Explain the safety issues of materials handling equipment and processes.

Identify the basics of fire safety as it relates to the industrial environment.

Explain the concepts of Welding and Laser hazards found in the workplace.

Demonstrate the ability to select and utilize the proper personal protective equipment to match the job task.

Demonstrate the ability to perform first aid, CPR, and utilize an AED to the current standard.

Explain the concepts of workplace security and violence in the workplace.

Explain the purpose and intent of industrial safety.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Worksheets and review sheets for OSHA topics will be assigned for the course. The cumulative score of the assignments will account for 100% of semester grade.
General Course Requirements and Recommendations
REQUIREMENTS FOR OBTAINING AN OSHA 30-HOUR GENERAL INDUSTRY OUTREACH TRAINING COURSE COMPLETION CARD

To be eligible to receive an OSHA 30-Hour General Industry Outreach Training Course Completion Card, students must meet each of the following requirements:

1 - The course Instructor must be authorized by OSHA to conduct the 30-Hour General Industry Outreach Training Program.

2 - Students complete all assigned worksheets and review sheets for the course.

3 - Students must have no absences from class presentation.

Upon successful completion of the above requirements, the necessary paperwork will be filed for the student to receive an OSHA 30 Hour General Industry Outreach Training Program Course Completion Card issued by the Occupational Safety and Health Administration.

Texts
Texts, handouts, and/or workbooks will be determined by the TAE Department.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for TAFD 120

TAFD126 - Proc Industry Health, Environ & Safety

Overview

Subject
Skilled Trade & Apprenticeship

Academic Department
Skilled Trade and Apprentice Education

School
Business, Entrepreneurshp, PD

Course Description
Offers exposure to the various safety, health, environmental, and safety issues directly associated with the process industries. Includes hazard recognition, types of hazards, cyber security, engineering controls, administrative controls, personal protective equipment, safety-related equipment, first aid, and governmental regulations. Emphasizes extensive hands-on experiences.

Course Pre-requisite(s)
TAFD120 Industrial Safety Awareness or TAFD125 - Missing course & TAFD117 Industrial Computer Applicatio & TAPT100 Intro to Process Tech Practice or Instructor Permission

Credit Hours
4

Total Contact Hours
Total Instructor Contact Hours:
62

Total Student Contact Hours:
62

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Departmental Exam, Skilled Demonstration, Portfolio Review, Licensure/ certifications, Other

Credit for Prior College Level Learning (CPCLL) Details
This course is identified as a departmental course for which a learner can receive college credit for prior college-level learning and/or skills acquired outside the traditional classroom. Terms of the HFC Credit for Prior College-Level Learning Policy may be met by review of the appropriate documentation, skill, certifications, and/or knowledge acquired by the learner and submitted for evaluation by the appropriate departmental faculty. As required, one or more of the following may be considered in the evaluation process:

1)Field experience,

2)Licenses held,

3)Completing course exams and/or,

4)Performance sequences and/or,

5)Competing a portfolio,

6)Assessment of private trade school or other extensive college level industry training and learning by a departmental faculty member.

Goals, Topics, and Objectives

Core Course Topics

1. Hazard Types and Their Effects
2. Recognizing Chemical Hazards
3. Recognizing Biological Hazards
4. Equipment and Energy Hazards
5. Fire and Explosion Hazards
6. Pressure, Temperature, and Radiation Hazards
7. Hazardous Atmospheres and Respiratory Hazards
8. Working Area and Height Hazards
9. Hearing and Noise Hazards
10. Construction, Maintenance, and Tool Hazards
11. Vehicle and Transportation Hazards
12. Natural Disasters and Inclement Weather
13. Physical Security and Cyber Security
14. Recognizing Ergonomic Hazards
15. Recognizing Environmental Hazards
16. Introduction to Hazard Controls
17. Engineering Controls: Alarms and Indicator Systems
18. Engineering Controls: Process Containment and Process Upset Controls
19. Administrative Controls: Programs and Practices
20. Permitting Systems
21. Personal Protective Equipment and First Aid
22. Monitoring Equipment
23. Fire, Rescue, and Emergency Response Equipment

Discuss the safety, health, and environmental hazards found in the process industries.

Describe the intent and application of the primary regulations impacting the process industries.

Discuss, locate, and utilize OSHA 1910.119 Process Safety Management (PSM).

Discuss, locate, and utilize OSHA 1910.132 - Personal Protective Equipment (PPE).

Discuss, locate, and utilize OSHA 1910.1200 - Hazard Communication (HAZCOM).

Discuss, locate, and utilize OSHA 1910.120 - Hazardous Waste Operations and Emergency Response (HAZWOPER).

Discuss, locate, and utilize DOT CFR 49.173.1 - Hazardous Materials - General Requirements for Shipments and Packaging.

Discuss, locate, and utilize EPA CFR 264.16 - Resource Conservation and Recovery Act (RCRA).

Describe the role of the process technician in achieving successful compliance with all local, county, state, and federal regulations.

Describe the personal attitudes and behaviors that can help to prevent workplace accidents and incidents.

Describe the components of the fire triangle and the fire and fire tetrahedron.

Identify the consequences of non-compliance with regulations: Legal -Moral and Ethical -Safety, Health, and Environmental.

Explain the managerial and engineering controls used in the industry to minimize hazards and maximize worker and system protection in the workplace.

Describe and demonstrate the correct use of personal protective equipment (PPE).

Describe the intent of the OSHA - Voluntary Protection Program (VPP).

Describe the application of the International Organization of Standards (ISO)-14000 as it relates to the process industries.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Students will be required to complete Chapter Reviews as assigned. Each Chapter Review will have an assigned point value.
Students will be administered four online Module Exams. Module Exams will cover specific course material as assigned.
Students will be required to participate in a minimum of four online discussions of select topics using an online Discussion Board.
Students will be required to create a Safety Resource Library.
Students will be required to complete four (4) Assignments, each with an assigned point value. Assignments can be downloaded and completed. A hard copy of the completed Assignments must be turned in for credit.
Students will be administered an online comprehensive Final Exam.
Students will be required to maintain a student spreadsheet - recording attendance, Chapter Review scores, Discussion Board scores, Module Exam scores, Assignments, and Final Exam score. Completed spreadsheet will be turned in and will be used as part of the calculation of the final grade.
The scores of the scheduled Chapter Reviews, Module Exams, Discussion Boards, Safety Resource Library, Assignments, Final Exam, and Student Spreadsheet will be used to calculate the semester grade.
Texts
Texts, handouts, and/or workbooks will be determined by the TAE Department.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for TAFD 126

TAFD130 - Industrial Applications Physical Science

Overview

Subject
Skilled Trade & Apprenticeship

Academic Department
Skilled Trade and Apprentice Education

School
Business, Entrepreneurshp, PD

Course Description
Offers the apprentice lecture exposure to the applications of physics and chemistry found in today's industrial workplace. Covers the six elemental machines; applications of forces, motion, and work; and the chemistry of industrial materials and chemical interactions in the environment.

Course Pre-requisite(s)
TAMA120 Indust Appl of Algebraic Princ or Instructor Permission

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
25

Academic Level
Undergraduate

General Education Category
Natural Sciences

Michigan Transfer Agreement (MTA) Category
Category 6: Natural Sciences - Applied Degrees

Goals, Topics, and Objectives

Core Course Topics

1. Introduction-Fundamental Concepts of Measurement
2. Measurement Related to the Fundamental Physical Quantities
3. Description of Linear Motion
4. Industrial Applications of Force and Motion
5. Universal Gravitation
6. Industrial Applications of Circular Motion
7. Industrial Applications of Forces
8. Industrial Applications of Work and Power
9. Energy: Its Forms and Kinds
10. Machines and their Industrial Applications
11. Effects of Temperature and Heat
12. Chemical Building Blocks
13. Compounds, Molecules, and Ions
14. Organic Chemistry
15. Chemistry and the Environment

Describe how the physical and chemical properties of industrial processes and materials affect safety in the workplace.

Utilize both English and metric units of measure in physical science applications.

Define the concepts of mass, force, and motion and identify their practical applications in the workplace.

Define the concepts of energy, work, and power and identify their practical applications in the workplace.

Apply the concepts of mass, force, motion, energy, work, and power to the six basic machines.

Describe the physical and chemical properties of matter.

Describe the structure of atoms and molecules.

Identify the practical applications of reactions involving oxidation and reduction.

Discuss the chemistry of the environment, including air pollution, the chemistry of trace metals, hazardous waste in the ground and water, and radioactive wastes.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of academic achievement may include (but is not limited to) exams, quizzes, and homework

Texts
Texts, handouts, and/or workbooks will be determined by the TAE Department.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for TAFD 130

TAFD150 - Applied Technology

Overview

Subject
Skilled Trade & Apprenticeship

Academic Department
Skilled Trade and Apprentice Education

School
Business, Entrepreneurshp, PD

Course Description
An introductory course, appropriate for all trades, which uses practical concepts and examples to examine fluid power, electricity, mechanical power transfer, and rigging. Emphasizes appropriate safety procedures and protocols.

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
25

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Introduction to fluid power.
2. Hydraulics.
3. Pneumatics.
4. Introduction to electricity.
5. Electricity DC & measuring instruments.
6. Electricity AC & circuits.
7. Introduction to mechanical power transmission (MPT), anti-friction bearings, and couplings.
8. Chain drives and V-belt drives.
9. Gear drives.
10. Introduction to rigging and selection of lifting devices.
11. Selection of attachments.
12. Interpretation of rigging capacity charts and tags, inspection of equipment, safety considerations, and hoists.
13. Hand signals.
14. Calculations & safety.

Explain the generation of power through electricity and fluid power.

Calculate problems associated with hydraulic/pneumatic problems.

Explain the concepts of distribution of power through mechanical power transmission, fluid power, and electricity.

Explain the concept of control of power through mechanical power transmission, fluid power, and electricity.

Calculate DC electrical values.

Explain the importance of the concept of systems in the areas of mechanical power transmission, fluid power, and electricity.

Identify the various devices utilized in mechanical power transmission, fluid power, and electricity.

Identify various rigging devices and equipment.

Calculate rigging weight and sling load values.

Describe proper rigging techniques, operations, and the appropriate application of devices.

Explain the importance of safety as it relates to rigging, mechanical power transmission, fluid power, and electricity.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
All students will be required to complete five tests: one for calculations, one for fluid power, one for electricity, one for rigging, and one for mechanical power transmission. The student will be considered to have completed the course by receiving a cumulative average grade of 70%.
General Course Requirements and Recommendations
Calculator Use: Students are encouraged to bring a calculator to all class sessions. Any scientific calculator will be sufficient for this course.

Texts
Texts, handouts, and/or workbooks will be determined by the TAE Department.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for TAFD 150

TAFD295 - Industrial Maintenance Externship

Overview

Subject
Skilled Trade & Apprenticeship

Academic Department
Skilled Trade and Apprentice Education

School
Business, Entrepreneurshp, PD

Course Description
Provides field experience in an advanced manufacturing mechatronics environment with students working a minimum of four hours per week throughout the 15 week semester. Offers first-hand the activities, work-practices, and procedures of mechatronics maintenance personnel. Intended for those who have never worked in, or been exposed to, mechatronic manufacturing maintenance in an industrial production facility. Students will work with the divisional faculty/staff to identify field placements.

Course Pre-requisite(s)
Must have completed 45 credit hours or Instructor Permission

Credit Hours
2

Total Contact Hours
Total Instructor Contact Hours:
32

Total Student Contact Hours:
32

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
Submission of work-related experience report reflecting course competencies and successful completion of course exams and projects as assessed by the instructor.

Goals, Topics, and Objectives

Core Course Topics

1. The facility design – i.e. Mass production, Job shop
2. Plant specific maintenance tasks and procedures
3. Types of mechatronic equipment/systems used in production
4. Mechatronic relationships (systems approach) i.e. electro-pneumatic, mechanical-hydraulic
5. Organizational maintenance practices

Identify the facility operational style.

Identify the product created.

Explain the maintenance requirements of the facility.

Identify the machinery used in the facility.

Explain the mechatronic relationships of the operational systems.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
The instructor and facilities supervisor or maintenance mentor will assess the student based upon his/her projects/work. This will include an assessment of the student's demonstrated interest and willingness to learn and any contributions made to the in-plant maintenance team. A 500-word essay related to the student's experience will be required. The student will also research and deliver a 15-minute presentation on a maintenance issue within the facility.
General Course Requirements and Recommendations
This course will give the learner experience in the mechatronic manufacturing maintenance arena.

Texts
Texts, handouts, and/or workbooks will be determined by the TAE Department.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for TAFD 295

TAFP150 - Introduction to Industrial Hydraulics

Overview

Subject
Skilled Trade & Apprenticeship

Academic Department
Skilled Trade and Apprentice Education

School
Business, Entrepreneurshp, PD

Course Description
Introduces the principles of fluid power as applied to industrial systems. Presents various hydraulic components and their functions within fluid power systems. Laboratory activities.

Course Pre-requisite(s)
TAFD150 Applied Technology or Instructor permission

Credit Hours
4

Total Contact Hours
Total Instructor Contact Hours:
62

Total Student Contact Hours:
62

Course Fee
20

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Introduction, Safety Policies and Procedures, Review
2. Basic Hydraulic Theory, Transmission of Force, Laws of Power Hydraulics
3. Components Used to Control Hydraulic Energy, Technical Terms, Hydraulic Symbols
4. Hydraulic Fluid, Fluid Conductors, Seals
5. Reservoirs and Contamination Control
6. Hydraulic Pumps
7. Hydraulic Actuators
8. Directional Valves
9. Pressure Controls
10. Flow Controls
11. Cartridge and Stack Valves, Proportional and Servo Valves
12. Hydraulic Accessories
13. Hydraulic Systems
14. Troubleshooting and Noise Control

Utilize safe work practices when dealing with hydraulic equipment in the lab.

Describe the behavior of a fluid. Match fluid power terminology and symbology, to a description of their function.

Identify various cylinder types, styles, and their function in a fluid power system.

Apply simple fluid power laws to fluids under load and flow conditions.

Describe the functions of reservoirs, filters, and strainers as components of a fluid power system.

Match petroleum and synthetic base fluids to their characteristics.

Identify various pump types, styles, internal components, and their function within the fluid power system.

Identify various valve types, styles, internal components, and their function within the fluid power system.

Analyze the operation/function of simple relief, compound relief, and pressure control valves circuit.

Identify various conductors and their corresponding sizing/assembly methods.

Assemble and debug various hydraulic circuit from an ANSI prints.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
All assessment of student achievement is left to the discretion of the individual instructor. Final grade will be a combination of quiz grades, lab assignments, and the final exam.

Texts
Texts, handouts, and/or workbooks will be determined by the TAE Department.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for TAFP 150

TAFP160 - Pneumatic Power and Control

Overview

Subject
Skilled Trade & Apprenticeship

Academic Department
Skilled Trade and Apprentice Education

School
Business, Entrepreneurshp, PD

Course Description
Explores the principles of fluid power pneumatics as applied to industrial systems. Examines various pneumatic components with respect to their functions within pneumatic power and control systems.

Credit Hours
4

Total Contact Hours

Total Instructor Contact Hours:
62

Total Student Contact Hours:
62

Course Fee
20

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Basic Relationships, Safety Policies and Procedures
2. Characteristics of Compressed Air, Terminology and Symbols Used in Pneumatics, Physical Properties
3. Compressed Air Production, Types of Compressors, Criteria for Selection of Compressors
4. Distribution of Compressed Air, Contamination, Compressed Air Filters, and Pressure Regulation
5. Compressed Air Lubrication, Service Unit
6. Pneumatic Working Elements, Pneumatic Cylinders, Types of Mounting, and Cylinder Construction
7. Calculations for Cylinders and Rotary Operation Pneumatic Elements
8. Basic Units and Cylinder with Mounted Air Control Block Hydro-pneumatic Systems
9. Feed Unit, Rotary Index Table, Collet Chuck, Air Cushion Sliding Table, Vacuum Suction Nozzle, and Vacuum Suction Head
10. Valves and Directional Valves
11. One-way Valves and Pressure Control Valves
12. Shut-off Valve, Valve Combinations, and Program Control Unit
13. Proximity Sensing Devices, Air Barrier, Back-pressure Sensor, Pressure Amplifiers - single stage and two stage
14. Pneumatic-electric Signal Conversion, Signal Converter, and Signal Converter Contractor

Define basic pneumatic terms.

Describe basic pneumatic concepts.

Diagram a pneumatic circuit to code.

Analyze a pneumatic system.

Identify the basic pneumatic components.

Identify the characteristics of air power.

Describe trouble concerns in components of a pneumatic power system.

Analyze and troubleshoot pneumatic hydraulic circuits according to standard practices.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of academic achievement may include (but is not limited to) exams, quizzes, homework, and laboratory assignments.

Texts
Texts, handouts, and/or workbooks will be determined by the TAE Department.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for TAFP 160

TAFP270 - Fluid Pow Sys:CircuitDesign&Troublesho

Overview

Subject
Skilled Trade & Apprenticeship

Academic Department
Skilled Trade and Apprentice Education

School
Business, Entrepreneurshp, PD

Course Description
Explores the principles of fluid power design and troubleshooting as applied to industrial systems. Presents various hydraulic circuits and discusses functions, efficiencies, and troubleshooting guidelines within fluid power systems.

Course Pre-requisite(s)
TAFP150 Intro to Industrial Hydraulics or Instructor Permission

Credit Hours
4

Total Contact Hours

Total Instructor Contact Hours:
62

Total Student Contact Hours:
62

Course Fee
25

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Safety policy and procedures and linear actuator circuits.
2. Pressure gauges and control - direct acting pressure relief valves.
3. Pressure control - pilot operated relif valve circuits.
4. Pressure control - multiple relief valve control circuits.
5. Pumps - variable displacement and volumetric efficiency.
6. Pumps - pressure compensated circuits.
7. Flow control - meter-in and meter-out circuits and pressure compensated circuits.
8. Pressure and flow control - counter balance circuits and load holding with check valve circuits.
9. Pressure control - actuator sequencing circuits.
10. Pressure control - reducing valve circuits and load sensing circuits.
11. Directional control - pilot operated directional control valve circuits.
12. Linear circuit control - regenerative cylinder circuits.
13. Pressure control - cross port relief valve circuits.
14. Troubleshooting.

Demonstrate industry safety standards when working with hydraulic equipment.

Use ISO/ANSI fluid power terminology and symbology when discussing and diagramming fluid power systems.

Design, assemble, set-up, adjust, and operate a hydraulic system containing conventional industrial hydraulic components.

Troubleshoot a defective hydraulic circuit, identifying the fault(s) and preparing a report recommending remedial action.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
All assessment of student achievement is left to the discretion of the individual instructor. Final grade will be a combination of quiz grades, lab assignments, and the final exam.

Texts
Texts, handouts, and/or workbooks will be determined by the TAE Department.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for TAFP 270

TAFP280 - Applied Electrohydraulics

Overview

Subject
Skilled Trade & Apprenticeship

Academic Department
Skilled Trade and Apprentice Education

School
Business, Entrepreneurshp, PD

Course Description
Introduces basic electrohydraulic fundamentals, components, and procedures relative to troubleshooting, maintenance, and set-up of proportional and servo valves. Presents theory and practice of electrohydraulics with an emphasis on hands-on laboratory experiences.

Course Pre-requisite(s)
TAFP150 Intro to Industrial Hydraulics or Instructor Permission

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
10

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Introduction of safety policies/procedures and overview of electrohydraulic technology.
2. Proportional pressure control valves.
3. Proportional pressure control valve amplifiers.
4. Proportional directional valves.
5. Proportional directional valve amplifiers.
6. Load compensation with pressure compensators.
7. Proportional flow control valves.
8. Proportional flow control valve amplifiers.
9. Electronic controls for proportional valves.
10. Introduction to servo technology.
11. Servo valve technology.
12. Open to closed loop control circuits.
13. Filtration of hydraulic systems equipped with servo and proportional valves.
14. Proportional and servo valve systems.

Demonstrate industry safety standards when working with hydraulic equipment in the lab.

Disassemble, inspect, reassemble, and calibrate proportional and servo valves in accordance with manufacturers specifications and instructions.

Interpret and apply valve specifications from reference literature and/or service manuals for troubleshooting, set-up, or calibration purposes.

Assemble, set-up, and calibrate an operational hydraulic system containing proportional and/or servo valves and controls using positional, velocity, or force control by working from an ISO/ANSI print.

Identify various proportional and servo valves, their controls, styles, internal components, and their function within a fluid power system.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
All assessment of student achievement is left to the discretion of the individual instructor. Final grade will be a combination of quiz grades, lab assignments, and the final exam.

Texts
Texts, handouts, and/or workbooks will be determined by the TAE Department.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for TAFP 280

TAGD110 - Basic Shape and Size Interpretation

Overview

Subject
Skilled Trade & Apprenticeship

Academic Department
Skilled Trade and Apprentice Education

School
Business, Entrepreneurshp, PD

Course Description
Introduces the concepts of shape and size description of normal surfaced, inclined (single-angle) surfaced, and cylindrical objects. Presents traditional and computer-based drafting techniques. Covers projection of three-dimensional objects into two-dimensional representations, the reverse process, and sketching and modeling of objects.

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
20

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Introduction to drafting equipment and the Alphabet of Lines.
2. Use and care of drafting instruments, lettering, and title blocks.
3. Drawing normal surfaces.
4. Orthographic projection of normal surfaces.
5. Modeling and pictorial drawing of normal surfaces.
6. Geometric constructions and orthographic projection of cylindrical surfaces.
7. Drawing cylindrical surfaces and sub-titles.
8. Modeling and pictorial drawing of cylindrical surfaces.
9. Section views.
10. Auxilliary views.
11. Dimensioning normal surfaces.
12. Dimensioning cylindrical surfaces.
13. Assembly drawings.
14. Material lists, change blocks, and notes.

Demonstrate the use and maintenance of basic drafting instruments.

Utilize various drawings of example objects to develop special relationships.

Introduce the use of 3-dimensional models to develop spatial relationships.

Use spacial relationships to draw objects.

Utilize actual objects that will be manufactured in other classes as drawing objects in this class.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
All students will be required to complete a comprehensive final examination that assesses the learning of all course objectives. This exam will consist of four drawings, at least one being a CAD drawing. This exam must be weighted in a manner so that the exam score is worth a minimum of fifteen percent of the final course grade. This exam is to be a common exam administered to all sections of TAGD110 Basic Shape & Size Interpret.

General Course Requirements and Recommendations
The student will be required to bring to class drafting equipment that will be identified in the first session (or mailed to the students prior to the first meeting).

Texts
Texts, handouts, and/or workbooks will be determined by the TAE Department.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for TAGD 110

TAGD120 - Advanced Graphic Interpretation

Overview

Subject
Skilled Trade & Apprenticeship

Academic Department
Skilled Trade and Apprentice Education

School
Business, Entrepreneurshp, PD

Course Description
Introduces the concepts of shape and size description of oblique surfaced objects, sectioning, processes used in the manufacturing environment, and geometric and traditional tolerancing. Requires knowledge of traditional and computer-based drafting techniques.

Course Pre-requisite(s)
TAGD110 Basic Shape & Size Interpret or Instructor Permission

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
20

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Threaded fasteners and non-threaded fasteners.
2. Processing notes and oblique surfaces.
3. Drawing oblique surfaces.
4. Dimensioning oblique surfaces.
5. Castings, forgings, and cutting/viewing planes.
6. Full sections and partial sections.
7. Revolved, removed, aligned sections, and sectioning of ribs and webs.
8. Weldments.
9. Tolerances.
10. Tolerances and fits.
11. Geometric dimensioning and tolerances and form tolerances.
12. Profile, orientation, and runout tolerances.
13. Location tolerances.
14. Assembly drawings.

Describe advanced projection of oblique and slanted surfaces.

Utilize various drawings of example objects to develop advanced spatial relationships.

Explain the use of GD&T in detail drawings.

Calculate tolerances.

Explain sectioning techniques.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
All students will be required to complete a comprehensive final examination that assesses the learning of all course objectives. This exam will consist of four drawings, at least one being a CAD drawing. This exam must be weighted in a manner so that the exam score is worth a minimum of fifteen percent of the final course grade. This exam is to be a common exam administered to all sections of TAGD120 Advanced Graphic Interpretatio.

General Course Requirements and Recommendations
The student will be required to bring the drafting equipment used in previous drafting courses. Modeling clay is also required.

Texts
Texts, handouts, and/or workbooks will be determined by the TAE Department.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for TAGD 120

TAGD130 - Assembly Detailing

Overview

Subject
Skilled Trade & Apprenticeship

Academic Department
Skilled Trade and Apprentice Education

School
Business, Entrepreneurshp, PD

Course Description
Presents the concept of detailing of assembly drawings, including modeling of complex shapes and pictorial drawings of details. Through the use of traditional and computer-based drafting techniques, students explore drawing individual parts in their proper orientation. Modeling clay is required.

Course Pre-requisite(s)
TAGD120 Advanced Graphic Interpretatio or Instructor Permission

Credit Hours
2

Total Contact Hours

Total Instructor Contact Hours:
32

Total Student Contact Hours:
32

Course Fee
20

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Introduction to sketching.
2. Sketching details from a pictorial assembly.
3. Drawing from sketches.
4. Sketching details from a working drawing.
5. Modeling details from sketches.
6. Drawing complex shapes from sketches.
7. Sketching details from an exploded view assembly.
8. Drawing details from sketches.
9. Determining tolerances and fits.
10. Complex assemblies.
11. Sketching details from complex assembly drawings.
12. Modeling details from complex assembly drawings.
13. Drawing details from sketches.
14. Interpreting assembly drawings.

Match irregular planes and surfaces to determine spatial relationships.

Identify the various types of assembly drawings.

Model complex details through visualization.

Demonstrate the process to produce an assembly drawing.

Utilize various drawings of example objects to develop assembly drawings.

Use 3-dimensional models to develop assembly drawings.

Utilize detail drawings to draw an assembly drawing.

Utilize actual objects that will be manufactured in other classes as drawing objects for this class.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
All students will be required to complete a common TAGD130 Assembly Detailing comprehensive final examination that assesses the learning of all course objectives. This exam will consist of two parts, the first part consisting of a drawing project and the second part will be a team assembly drawing assignment. This exam must be weighted in a manner so that this exam score is worth a minimum of fifteen percent of the final course grade.

General Course Requirements and Recommendations
The student will be required to bring the drafting equipment used in the previous two drafting courses (TAGD110 Basic Shape & Size Interpret and TAGD120 Advanced Graphic Interpretatio). Modeling clay is also required.

Texts
Texts, handouts, and/or workbooks will be determined by the TAE Department.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for TAGD 130

TAGD140 - Compound Angles and Advanced Projection

Overview

Subject
Skilled Trade & Apprenticeship

Academic Department
Skilled Trade and Apprentice Education

School
Business, Entrepreneurshp, PD

Course Description
Focuses on the mastery of solid trigonometric principles as applied to the industrial workplace. Includes the solution of solid trigonometric problems using graphic and analytical solutions and problem solving techniques. Requires modeling clay.

Course Pre-requisite(s)
TAMA120 Indust Appl of Algebraic Princ or Instructor Permission

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
20

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Describing a double angled cut on a rectangular work piece.
2. Solving a double angled cut on a rectangular work piece.
3. Single rotation and single tilt.
4. Shop applications of double angle cuts.
5. Shop applications of double angle cuts.
6. Describing a double angled axis for a bored hole in a rectangular work piece.
7. Solving a double angled axis for a bored hole in a rectangular work piece.
8. Shop applications.
9. Shop applications.
10. Describing the axis of 2 double angled bored holes in a work piece.
11. Solving the axis of 2 double angled bored holes in a work piece.
12. Single rotation with a double tilt.
13. Shop applications.
14. Shop applications.

Utilize graphing and analytical tools to understand angles of tilt and rotation.
Use the trigonometry functions to solve tetrahedron and pentahedron problems.
Solve actual shop problems using analytical (solid trigonometry) and graphical methods (multiple auxiliary views).
Solve actual shop problems using given techniques.
Solve problems related to special relationships.
Develop the ability to work in 3-dimensions using 2-dimensional representations.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
All students will be required to complete a comprehensive final examination that assesses the learning of all course objectives. This exam must be weighted in a manner so that the exam score is worth a minimum of fifteen percent of the final course grade. This exam is to be a common exam administered to all sections of TAGD140 Comp Angles & Adv Projection.

General Course Requirements and Recommendations
The student will be required to bring the drafting equipment used in previous drafting courses. Modeling clay is also required.

Texts
Texts, handouts, and/or workbooks will be determined by the TAE Department.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for TAGD 140

TAGD150 - Tool, Jig, and Fixture Design

Overview

Subject
Skilled Trade & Apprenticeship

Academic Department
Skilled Trade and Apprentice Education

School
Business, Entrepreneurshp, PD

Course Description
Focuses on the mastery of tool-design principles as applied to the industrial workplace. Covers tolerances, fits, principles of tool design, template jigs and fixtures, plate and channel jigs, and materials joining fixtures. Discusses economical design principles and the teamwork approach to various projects.

Course Pre-requisite(s)
TAGD130 Assembly Detailing and TAMA200 Indust Appl Trigonomic Princip or Instructor Permission

Credit Hours
2

Total Contact Hours

Total Instructor Contact Hours:
32

Total Student Contact Hours:
32

Course Fee
20

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Tolerances and fits.
2. Standard parts and bill of material.
3. Supporting and locating principles.
4. Workholding and tool construction principles.
5. Template jigs for drilling.
6. Template jigs for other operations.
7. Template jigs for milling.
8. Plate jigs and fixtures.
9. Angle plate fixtures.
10. Channel jig.
11. Box jigs.
12. Vice jigs and fixtures.
13. Vice jigs and fixtures.
14. Materials joining fixtures.

Utilize manual and computer assisted drawings to make tool drawings.
Solve actual shop problems using team problem solving techniques on several projects.
Solve actual shop problems from industrial drawings of tools and fixtures.
Solve problems related to industrial applications.
Interpret actual industrial drawings of tools and fixtures.
Develop tools from actual industrial applied parts.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
All students will be required to complete a comprehensive final examination that assesses the learning of all course objectives This exam must be weighted in a manner so that the exam score is worth a minimum of fifteen percent of the final course grade. This exam is to be a common exam administered to all sections of TAGD150 Tool, Jig, and Fixture Design.

General Course Requirements and Recommendations
The student will be required to bring the drafting equipment used in previous drafting courses.

Texts
Texts, handouts, and/or workbooks will be determined by the TAE Department.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for TAGD 150

TAGD155 - Gage, Cam Layout and Fixture

Overview

Subject
Skilled Trade & Apprenticeship

Academic Department
Skilled Trade and Apprentice Education

School
Business, Entrepreneurshp, PD

Course Description
Focuses on the mastery of gage design principles as applied to the industrial workplace. Discusses gage design theory, computer-aided manufacturing, cam layout procedures, and fixturing. Emphasizes the team approach to projects.

Course Pre-requisite(s)
TAGD150 Tool, Jig, and Fixture Design or Instructor Permission

Credit Hours
2

Total Contact Hours

Total Instructor Contact Hours:
32

Total Student Contact Hours:
32

Course Fee
20

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Gage design theory.
2. Typical go-no go gages.
3. Go-no go gage applications.
4. Gaging contours.
5. Template gages.
6. Inspection fixtures.
7. Coordinate measuring equipment.
8. Coordinate measurement fixturing.
9. Coordinate measuring.
10. Cam layout.
11. Air gages.

Utilize manual and computer assisted drawings to make gage and cam layout drawings.

Solve actual shop problems using team problem solving techniques on several projects.

Solve actual shop problems from industrial drawings of gages and fixtures.

Solve problems related to industrial applications.

Interpret actual industrial drawings of gages and fixtures.

Develop gages from actual industrial applied parts.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
All students will be required to complete a comprehensive final examination that assesses the learning of all course objectives This exam must be weighted in a manner so that the exam score is worth a minimum of fifteen percent of the final course grade. This exam is to be a common exam administered to all sections of TAGD155 Gage, Cam Layout, and Fixture.

General Course Requirements and Recommendations
The student will be required to bring the drafting equipment used in previous drafting courses.

Texts
Texts, handouts, and/or workbooks will be determined by the TAE Department.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for TAGD 155

TAGD160 - Press Working Fundamentals

Overview

Subject
Skilled Trade & Apprenticeship

Academic Department
Skilled Trade and Apprentice Education

School
Business, Entrepreneurshp, PD

Course Description
Discusses basic metal deformation theory, presses and ancillary equipment, die construction, and die component identification. Covers various die types and draws the various detail components using both traditional and computer-aided drafting.

Course Pre-requisite(s)
TAGD130 Assembly Detailing or Instructor Permission

Credit Hours
2

Total Contact Hours

Total Instructor Contact Hours:
32

Total Student Contact Hours:
32

Course Fee
20

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Stress/strain relationships.
2. Press working forces.
3. Mechanical presses.
4. Mechanical press driving mechanisms and number of actions.
5. Special presses and equipment.
6. Die shoes, guide pins, and heels.
7. Punches, buttons, and punch holders.
8. Backing plates, risers, and cutting steels.
9. Composite steels and trimming die cutters.
10. Forming steels, bending, curling, and beading.
11. Forming steels, flanging, and side movement control.
12. Large area deformation of metals and drawing.
13. Draw die punches.
14. Progressive dies.

Describe metal deformation.

Explain the use of strain/stress diagrams of various metals.

Utilize various drawings of example objects to develop spatial relationships.

Visualize and explain the die assembly and motion of it.

Interpret actual industrial drawings of die assemblies.

Utilize actual dies that have been manufactured in other classes as drawing projects for this class.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
All students will be required to complete a comprehensive final examination that assesses the learning of all course objectives This exam must be weighted in a manner so that the exam score is worth a minimum of fifteen percent of the final course grade. This exam is to be a common exam administered to all sections of TAGD160 Press Working Fundamentals.

General Course Requirements and Recommendations
The student will be required to bring the drafting equipment used in previous drafting courses.

Texts
Texts, handouts, and/or workbooks will be determined by the TAE Department.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for TAGD 160

TAGD165 - Cutting and Forming Dies

Overview

Subject
Skilled Trade & Apprenticeship

Academic Department
Skilled Trade and Apprentice Education

School
Business, Entrepreneurshp, PD

Course Description
Presents basic die design criteria and methods. Introduces various die types and draws the various die assemblies using both traditional and computer-aided drafting.

Course Pre-requisite(s)
TAGD130 Assembly Detailing or Instructor Permission

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
20

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Blanking dies.
2. Blanking die design project.
3. Pierce dies.
4. Pierce die design project.
5. Forming dies.
6. Solid forming die design project.
7. Flanging die design project.
8. Draw dies.
9. Stretch draw dies.
10. Stretch draw die design project.
11. Trimming dies.
12. Trim die design project.
13. Progressive dies.

Utilize manual drawing techniques to make sketches and drawings to design dies.

Design various styles of dies.

Utilize various drawings of example objects to develop spatial relationships.

Visualize and explain die design.

Interpret actual industrial drawings of die assemblies.

Utilize actual dies that have been manufactured in other classes as drawing projects for this class.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
All students will be required to complete a comprehensive final examination that assesses the learning of all course objectives This exam must be weighted in a manner so that the exam score is worth a minimum of fifteen percent of the final course grade. This exam is to be a common exam administered to all sections of TAGD165 Cutting and Forming Dies.

General Course Requirements and Recommendations
The student will be required to bring the drafting equipment used in previous drafting courses.

Texts
Texts, handouts, and/or workbooks will be determined by the TAE Department.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for TAGD 165

TAGD171 - Descriptive Geometry: Lines and Planes

Overview

Subject
Skilled Trade & Apprenticeship

Academic Department
Skilled Trade and Apprentice Education

School
Business, Entrepreneurshp, PD

Course Description
Covers basic descriptive geometry theory, and explores how to use orthographic principles to find true views of lines and planes.

Course Pre-requisite(s)
TAGD120 Advanced Graphic Interpretatio or Instructor Permission

Credit Hours
2

Total Contact Hours

Total Instructor Contact Hours:
32

Total Student Contact Hours:
32

Course Fee
20

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Lines, planes, notation, fold lines, and projection of points into space.
2. True lengths of lines.
3. Point view of a line, distance between a point and a line, and the perpendicular line principle.
4. Intersecting and non-intersecting lines.
5. Parallel and skewed (non-parallel) lines.
6. Planes.
7. Horizontal, frontal, and profile planes.
8. Edge views of planes.
9. Points and planes.
10. True angles.

Explain the concept of fold lines and reference planes for the purpose of creating auxiliary views.

Explain the technique of locating lines and points in space.

Explain the three principle viewing directions as well as inclined and oblique views.

Solve actual shop problems using given techniques.

Solve problems related to special relationships.

Develop the ability to work efficiently and effectively in 3-dimensions using 2-dimensional representations.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
All students will be required to complete a comprehensive final examination that assesses the learning of all course objectives This exam must be weighted in a manner so that the exam score is worth a minimum of fifteen percent of the final course grade. This exam is to be a common exam administered to all sections of TAGD171 Desc Geometry: Lines & Planes.

General Course Requirements and Recommendations
The student will be required to bring the drafting equipment used in previous drafting courses. Modeling clay is also required.

Texts
Texts, handouts, and/or workbooks will be determined by the TAE Department.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for TAGD 171

TAGD172 - Descriptive Geom: Planes, Solids & Dev

Overview

Subject
Skilled Trade & Apprenticeship

Academic Department
Skilled Trade and Apprentice Education

School
Business, Entrepreneurshp, PD

Course Description
Presents basic descriptive geometry theory and practice. Discusses how to use orthographic principles to find true views of planes and solids and their intersections.

Course Pre-requisite(s)
TAGD171 Desc Geometry: Lines & Planes or Instructor Permission

Credit Hours
2

Total Contact Hours

Total Instructor Contact Hours:
32

Total Student Contact Hours:
32

Course Fee
20

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Intersections of lines with planes and solids.
2. Intersections of multiple lines with a plane.
3. Intersections of planes.
4. Determining the bearing, slope, and grade of lines in space.
5. Finding the strike and dip of planes.
6. Introduction of cutting planes.
7. Edge view method.
8. Line projection method.
9. Cutting sphere method.
10. Applications of the four methods.
11. Introduction to developments.
12. Radial line developments.
13. Triangulation method of constructing developments.

Explain the concept of the relationship between lines, planes, and solids.

Explain and identify the various types intersections of solids and planes.

Solve descriptive geometry problems involving lines, planes, and solids using manual and computer-assisted methods.

Solve descriptive geometry problems requiring developments.

Solve actual shop problems using given techniques.

Solve problems related to special developments.

Work successfully in 3-dimensions using 2-dimensional representations.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
All students will be required to complete a comprehensive final examination that assesses the learning of all course objectives This exam must be weighted in a manner so that the exam score is worth a minimum of fifteen percent of the final course grade. This exam is to be a common exam administered to all sections of TAGD172 Desc Geom: Planes, Solid & Dev.

General Course Requirements and Recommendations
The student will be required to bring the drafting equipment used in the previous two drafting courses (TAGD 110 and TAGD 120). Modeling clay is also required.

Texts
Texts, handouts, and/or workbooks will be determined by the TAE Department.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for TAGD 172

TAGD280 - Panel Tipping

Overview

Subject
Skilled Trade & Apprenticeship

Academic Department
Skilled Trade and Apprentice Education

School
Business, Entrepreneurshp, PD

Course Description
Discusses how to convert vehicle body position drawings to required die positions in various die operations. Explores strip stock development and part clearance-interference conditions.

Course Pre-requisite(s)
TAGD172 Desc Geom: Planes, Solid & Dev or Instructor Permission

Credit Hours
2

Total Contact Hours

Total Instructor Contact Hours:
32

Total Student Contact Hours:
32

Course Fee
3

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Descriptive geometry fundamentals including true size of a surface.
2. True size surface and development of an angle between two surfaces.
3. Constructing true surfaces including constant size flanges and working with compound angles.
4. Determining clearance or interference between body components.
5. Developing strip stock to join two surfaces at a compound angle.
6. Development of an intersection between complex curved surfaces.
7. Initial exposure to vehicle body drafting and the concept of vehicle body lines.

Explain the methods for projecting sheet components into true view and develop optimum die position.

Design strip stock to join sheet metal components which are positioned at a compound angle.

Solve descriptive geometry problems involving vehicle body positioning.

Construct a specified angle between two sheet metal components.

Explain clearance and interference between components.

Solve shop problems related vehicle body positioning.

Explain vehicle body lines and component positioning.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
All students will be required to complete a comprehensive final examination that assesses the learning of all course objectives This exam must be weighted in a manner so that the exam score is worth a minimum of fifteen percent of the final course grade. This exam is to be a common exam administered to all sections of TAGD280 Panel Tipping.

General Course Requirements and Recommendations
The student will be required to bring the drafting equipment used in the previous two drafting courses (TAGD110 Basic Shape & Size Interpret and TAGD120 Advanced Graphic Interpretatio). Modeling clay is also required.

Texts
Texts, handouts, and/or workbooks will be determined by the TAE Department.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for TAGD 280

TAMA110 - Industrial Applications Basic Math Princ

Overview

Subject
Skilled Trade & Apprenticeship

Academic Department
Skilled Trade and Apprentice Education

School
Business, Entrepreneurshp, PD

Course Description
Utilizes shop problems to help students relate math to various job situations. Topics include addition, subtraction, multiplication, and division of whole and mixed numbers and common and decimal fractions; percents, averages, and estimates; graphs, tables, and statistical measure; powers and roots; linear, angular, and circular measure; surface area, volume, and cubic measure; ratios and proportion; and metrics and metric conversion.

Credit Hours
2

Total Contact Hours
Total Instructor Contact Hours:
32

Total Student Contact Hours:
32

Course Fee
3

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Portfolio Review

Credit for Prior College Level Learning (CPCLL) Details
Portfolio Review

Goals, Topics, and Objectives

Core Course Topics
1. Assessment, whole numbers, and fractional review
2. Addition and subtraction of common fractions
3. Addition and subtraction of mixed numbers
4. Multiplication and division of common fractions
5. Decimal fractions
6. Percents, averages, and estimates
7. Graphs, tables, and statistical measures
8. Powers and roots
9. Linear, angular, and circular measure
10. Surface area measure
11. Volume and cubic measure
12. Ratio and proportions
13. Metrication
14. Metric conversions

Add, subtract, multiply, and divide whole and mixed numbers in shop applications.

Add, subtract, multiply, and divide common and decimal fractions in shop applications.

Convert percents to decimals and decimals to percents in shop applications.

Solve shop problems using averaging and estimating.

Analyze graphs and tables used in technical written materials and reports.

Solve practical shop application problems requiring the use of statistical measure.

Use a hand-held calculator in the manipulation of shop problems.

Solve shop problems requiring the use of powers and roots.

Identify standard English units of linear measure.

Solve practical shop applications requiring surface area measurement.

Solve practical shop applications involving volume and cubic measure.

Solve practical shop applications of metric and metric conversions.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
1. **Quizzes:** The best 5 of 6 accounts for 75% of the semester grade. Make-ups on missed quizzes will be at the discretion of the Instructor. The first quiz missed will be dropped. Any additional missed quizzes will be recorded as a 0 or zero. All in-class quizzes will be administered with closed books and no notes allowed and only during regularly scheduled class periods.
2. **Final:** The final examination will account for 25% of the semester grade. The final must be taken to pass the course. The Final will be administered with closed books and no notes allowed and only during regularly scheduled class periods.

General Course Requirements and Recommendations
Calculator Use: Students are encouraged to bring a calculator to all class sessions. Any scientific calculator will be sufficient for this course.

Texts
Texts, handouts, and/or workbooks will be determined by the TAE Department.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for TAMA 110

TAMA120 - Industrial Applications Algebraic Princi

Overview

Subject
Skilled Trade & Apprenticeship

Academic Department
Skilled Trade and Apprentice Education

School
Business, Entrepreneurshp, PD

Course Description
Emphasizes mastery of basic algebraic principles as related to the industrial environment. Covers symbols, positive and negative numbers, equations, exponents, roots, and formulas.

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
30

Academic Level
Undergraduate

General Education Category
Mathematics

Michigan Transfer Agreement (MTA) Category
Category 3: Mathematics - Applied Degrees

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Portfolio Review

Credit for Prior College Level Learning (CPCLL) Details
Portfolio Review

Goals, Topics, and Objectives

Core Course Topics
1. The concept of symbols and terms.
2. Application of positive and negative numbers.
3. Application of symbols in addition and subtraction.
4. Application of symbols in multiplication and division.
5. Concepts of equations.
6. Solving equations by subtraction and addition.
7. Solving equations by multiplication and division.
8. Multiplication and division of numbers and letters with exponents.
9. Roots of numbers.
10. Use of algebraic formulas and equations.
11. Complex equations, special formulas, and handbook data.
12. Formulas.

Identify and apply the common terms and symbols used in algebra.

Solve application problems requiring the use of signed numbers.

Apply the concept of the Cartesian coordinate system.

Solve practical shop application problems using equations.

Apply the concepts of exponents in practical shop problems.

Apply the concepts of root values in practical shop problems.

Utilize algebraic formulas and equations in practical shop applications.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of academic achievement may include (but is not limited to) exams, quizzes, homework, and laboratory assignments.

General Course Requirements and Recommendations
Calculator Use: Students are encouraged to bring a calculator to all class sessions. Any scientific calculator will be sufficient for this course.

Texts
Texts, handouts, and/or workbooks will be determined by the TAE Department.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for TAMA 120

TAMA130 - Industrial Appl of Geometric Principles

Overview

Subject
Skilled Trade & Apprenticeship

Academic Department
Skilled Trade and Apprentice Education

School
Business, Entrepreneurshp, PD

Course Description
Covers the fundamental principles of plane geometry with emphasis on application to the industrial environment. Explores angular, circular, linear, area, and volume measurement in relation to the types of geometric figures and configurations found in industry.

Course Pre-requisite(s)
TAMA120 Indust Appl of Algebraic Princ or Instructor Permission

Credit Hours
2

Total Contact Hours

Total Instructor Contact Hours:
32

Total Student Contact Hours:
32

Course Fee
3

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Introduction to plane geometry.
2. Angular measure.
3. Angular geometric principles.
4. Triangles.
5. Similar figures.
6. Polygons.
7. Circles.
8. Areas of common polygons.
9. Areas of circles, sectors, segments, and ellipses.
10. Prisms and cylinders.
11. Pyramids and cones.
12. Spheres and composite objects.

Identify lines, points, and angles.

Solve practical problems involving lines, points, and angles.

Describe the different types of triangles and other polygons.

Solve practical applied problems involving triangles and other polygons.

Solve geometrical problems as applied to the shop floor.

Identify the types of circles, spheres, and ellipses.

Solve practical applied problems involving circles, spheres, and ellipses.

Identify the types of cones, cylinders, and pyramids.

Solve practical applied problems involving cones, cylinders, and pyramids.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
All students will be required to complete a comprehensive final examination that assesses the learning of all the course objectives. This exam must be weighted in a manner so that this exam score is worth a minimum of fifteen percent of the final course grade. This exam is to be a common exam administered to all sections of TAMA130 Indust Appl Geometric Prin.

General Course Requirements and Recommendations
Calculator Use: Students are encouraged to bring a calculator to all class sessions. Any scientific calculator will be sufficient for this course.

Texts
Texts, handouts, and/or workbooks will be determined by the TAE Department.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for TAMA 130

TAMA200 - Industrial Appl of Trigonomic Principles

Overview

Subject
Skilled Trade & Apprenticeship

Academic Department
Skilled Trade and Apprentice Education

School
Business, Entrepreneurshp, PD

Course Description
Focuses on trigonometric principles as applied to the industrial workplace. Covers trigonometric functions, solution of right triangles, solution of oblique triangles, and problem solving techniques.

Course Pre-requisite(s)
TAMA130 Indust Appl Geometric Prin or Instructor Permission

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
3

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Trigonometric functions-sine, cosine, and tangent.
2. Trigonometric functions-secant, cosecant, and cotangent.
3. Inverse trigonometric functions-arcsine, arc-cosine, and arctangent.
4. Solution of right triangles.
5. Industrial applications of right triangles.
6. Solution of oblique triangles using the altitude method.
7. Solution of oblique triangles using the law of sines.
8. Solution of oblique triangles using the law of cosines.
9. Solution of oblique triangles using the law of cotangents.
10. Industrial applications of oblique triangles.

Solve right angle trigonometry problems.

Solve oblique triangle trigonometry problems.

Solve industrial application problems.

Identify the basic trigonometry functions.

Solve trigonometry problems as applied to the shop floor.

Develop a basic problem setup methodology for industrial applications.

Explain the three basic and three reciprocal trigonometric functions.

Identify the trigonometric functions and inverse functions on the calculator.

Solve various industrial applications of right angle trigonometry.

Explain the sine, cosine, cotangent laws and altitude method for solution of oblique triangles.

Solve various industrial applications of oblique triangle trigonometry.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
All students will be required to complete a comprehensive final examination that assesses the learning of all the course objectives. This exam must be weighted in a manner so that this exam score is worth a minimum of fifteen percent of the final course grade. This exam is to be a common exam administered to all sections of TAMA200 Indust Appl Trigonomic Princip.

General Course Requirements and Recommendations
Calculator Use: Students are encouraged to bring a calculator to all class sessions. Any scientific calculator will be sufficient for this course.

Texts
Texts, handouts, and/or workbooks will be determined by the TAE Department.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for TAMA 200

TAMN100 - Shop Tools and Techniques

Overview

Subject
Skilled Trade & Apprenticeship

Academic Department
Skilled Trade and Apprentice Education

School
Business, Entrepreneurshp, PD

Course Description
Introduces the basic tools, safety protocols, and technical information required by the skilled trades. Includes non-precision and precision measurement tools and methods, layout tools and techniques, hand and bench tools, drills and drilling machines, principles of metal cutting and metal cutting saws, pedestal grinders, and various manufacturing processes.

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
20

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Shop safety, basic measurement, squares, and surface plates.
2. Basic and semi-precision layout.
3. Vernier calipers, height gages, and other calipers.
4. Physics of metal cutting, machinability, and metal cutting saws.
5. Outside micrometers and transfer instruments.
6. Grinding wheels, pedestal grinders, and off-hand grinders.
7. Inside micrometers, depth micrometers, depth gages, and dial gages.
8. Drilling machines, drills, cutting speeds, and feeds.
9. Hand tools, thread cutting tools, and finishing processes.
10. Drilling, reaming, tapping, and drilling operations.
11. Angular measurement.
12. Gage blocks and precision layout.
13. Gages and comparison measurement.

Explain the type, use, and applications of the common basic measuring tools.

Explain the type, use, and applications of precision measuring tools.

Select, demonstrate, and utilize the basic layout tools and techniques.

Demonstrate and utilize precision layout tools and techniques.

Explain the concept of metal cutting.

Explain the use of metal cutting saws, accessories, and techniques.

Demonstrate and utilize metal cutting saws, accessories, and techniques.

Explain the use of drills, drilling machines, drilling accessories, and techniques.

Demonstrate, and utilize drills, drilling machines, drilling accessories, and techniques.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
All students will be required to complete a set of competencies, work sheets, and tests. The student will be considered to have completed the course by receiving a cumulative average grade of 70%.
General Course Requirements and Recommendations
Calculator Use: Students are encouraged to bring a calculator to all class sessions. Any scientific calculator will be sufficient for this course.

Texts
Texts, handouts, and/or workbooks will be determined by the TAE Department.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for TAMN 100

TAMN120 - Machine Tool Applications

Overview

Subject
Skilled Trade & Apprenticeship

Academic Department
Skilled Trade and Apprentice Education

School
Business, Entrepreneurshp, PD

Course Description
Presents the mechanisms, operation, tooling, and accessories of the lathe and milling machine. Covers precision measurements and measuring devices, basic machine tool operations, metal cutting theory, cutting tools and cutting tool materials, and cutting fluids. Emphasizes safety protocols in a lab setting.

Course Pre-requisite(s)
TAMA120 Indust Appl of Algebraic Princ or Instructor Permission

Credit Hours
2

Total Contact Hours

Total Instructor Contact Hours:
32

Total Student Contact Hours:
32

Course Fee
10

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Outside and inside micrometers: dial bore and height gages.
2. Angular measurement: tool and techniques of semi-precision layout and precision layout.
3. Physics of metal cutting: machinability and cutting fluids.
4. Saws and sawing: drilling machines, drills, and drilling.
5. High speed steel cutting tools: carbide cutting tools and operating conditions.
6. Ceramic and cermet: cutting tools - polycrystalline cutting tools.
7. Engine lathe parts: lathe accessories and safety protocols.
8. Cutting speeds, feeds, and depth-of-cut: lathe centers.
9. Facing between centers: facing operations, turning between centers, turning operations, and special lathe operations.
10. Tapers and taper turning: additional lathe accessories.
11. Threads and thread cutting: additional lathe machining.
12. Milling machines and accessories: milling cutters.
13. Cutting speeds and feeds: milling machine setups.
14. Vertical milling machines: dividing heads.

Develop and demonstrate an understanding of precision measuring devices and precision layout techniques.

Develop and demonstrate an understanding of basic machine tools (saws, drills, and grinders) and their safe and efficient operation.

Develop and demonstrate an understanding of commonly utilized cutting tools and their recommended applications.

Develop and demonstrate an understanding of intermediate machine tools (lathes and mills) and their safe and efficient operation.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
All assessment of student achievement is left to the discretion of the individual instructor. Final grade will be a combination of quiz grades and attendance.

Texts
Texts, handouts, and/or workbooks will be determined by the TAE Department.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for TAMN 120

TAMN130 - Advanced Manufacturing Processes

Overview

Subject
Skilled Trade & Apprenticeship

Academic Department
Skilled Trade and Apprentice Education

School
Business, Entrepreneurshp, PD

Course Description
Explains the use of conventional abrasives and super abrasives, as well as traditional grinding machines. Covers advanced milling applications utilizing the horizontal boring mill; application of basic and advanced cutting tool materials; electrical discharge machining and wire cutting; electrochemical, abrasive flow, ultrasonic, and abrasive water jet machining; electromagnetic, electro spark, and powder metallurgy forming; various laser applications; and rapid prototype development and robotics/automation.

Course Pre-requisite(s)
TAMN120 Machine Tool Applications or Instructor Permission

Credit Hours
2

Total Contact Hours
Total Instructor Contact Hours:
30

Total Student Contact Hours:
30

Course Fee
10

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Conventional Abrasives
    - Superabrasives for Grinding
2. Grindability of Materials
    - Surface Grinders
    - Surface Grinder Accessories and Operations
3. Cylindrical Grinders
    - Cylindrical Grinding Operations
4. Universal Tool and Cutter Grinder
    - Jig Grinder
5. Conventional Cutting Tools
    - Advanced Cutting Tools
    - Advanced Cutting Tool Technology
6. Horizontal Boring Mill
    - Jig Bore
7. Electrical Discharge Machining (EDM)
    - EDM Tap Removal
8. Electrical Discharge Wire Cutting
    - Electro-Chemical Machining (ECM)
9. Explosive Forming Process
    - Electro-Spark Forming Process
    - Electro-Magnetic Forming Process
    - Powder Metallurgy Process
10. Abrasive Flow Machining
    - Ultrasonic Machining
11. Laser Technology
12. Abrasive Water Jet Machining
    - Chemical Milling
13. Rapid Prototype Development
    - Design for Manufacture
    - 3-D Solid Modeling
14. Robotics
    - Robotics Technology
    - Automation
    - Automation Processes

Develop and demonstrate an understanding of abrasives used in the manufacturing industry.

Develop and demonstrate an understanding of commonly used cutting tools used in the manufacturing industry.

Develop and demonstrate an understanding of horizontal boring mills and jig bores commonly used in the manufacturing industry.

Develop and demonstrate an understanding of non-traditional manufacturing processes used in the manufacturing industry.

Develop and demonstrate an understanding of non-traditional forming processes commonly used in the manufacturing industry.

Develop and demonstrate an understanding of rapid prototype development processes and techniques commonly used in the manufacturing industry.

Develop an understanding of three-dimensional solid modeling as it applies to the manufacturing industry.

Develop and demonstrate an understanding of robotics and automated systems commonly used in the manufacturing industry.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
All assessment of student achievement is left to the discretion of the individual instructor. Final grade will be a combination of quiz grades and attendance.

Texts
Texts, handouts, and/or workbooks will be determined by the TAE Department.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for TAMN 130

TAMT110 - Mechanical Power Transmission

Overview

Subject
Skilled Trade & Apprenticeship

Academic Department
Skilled Trade and Apprentice Education

School
Business, Entrepreneurshp, PD

Course Description
Presents installation and maintenance of mechanical power transmission systems. Covers bearings, couplings, belts, chains, shafts, pulleys, and speed reducers used in the modern factory by skilled trades.

Course Pre-requisite(s)
TAMA120 Indust Appl of Algebraic Princ or Instructor Permission

Credit Hours
2

Total Contact Hours

Total Instructor Contact Hours:
32

Total Student Contact Hours:
32

Course Fee
15

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. MPT systems, anti-friction bearings
2. Bearing failures, fits and bearing mounting designs
3. Lubrication, shields and seals
4. Bearing mounting and maintenance
5. Installation and removal of bearings
6. Couplings and U-joints
7. Power transmission drive chain
8. Power transmission belts, clutches and brakes
9. Conveyors and flat belts
10. Install and align a drive chain, a V-belt, and a flat rubber belt
11. SSpeed reducers
12. Dismantling, inspection, and assembling a gear-type speed reducer
13. Reactive, preventive, and predictive maintenance
14. Introduction to shaft alignment and vibration analysis
15. Assembling a conveyor system

Upon completion of this course the student will be able to: Practice the various proper shop safety procedures.

Identify the principles of lubrication utilized in MPT systems.

Explain the basic bearing principles and purposes.

Demonstrate the installation and removal tools used in MPT systems.

Remove and mount bearings, hubs, sprockets and gears.

Identify the different styles of flexible and rigid couplings.

Identify MPT drive chain systems and components.

Identify MPT belt drive systems and components.

Install and align chain and belt drives.

Explain the various conveyor systems and their applications.

Identify the various speed reducers and their applications.

Identify the different types of clutches and brakes.

Explain the difference between reactive, preventive, and predictive maintenance principles.

Identify the different shaft alignment principles and techniques.

Explain the principles of vibration analysis.

Objectives which involve critical thinking or problem solving.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
All students will be required to complete a comprehensive final exam that assesses the learning of all course objectives. This exam must be weighted in a manner so that the exam score is worth a minimum of fifteen percent of the final grade. This exam is to be a common exam administered to all sections of TAMT110 Mechanical Power Transmission.

General Course Requirements and Recommendations
Calculator use: Students are encouraged to bring a calculator to all classes. Any scientific calculator will be sufficient for this course.

Texts
Texts, handouts, and/or workbooks will be determined by the TAE Department.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for TAMT 110

TAMT115 - Maintenance Trades Print Reading

Overview

Subject
Skilled Trade & Apprenticeship

Academic Department
Skilled Trade and Apprentice Education

School
Business, Entrepreneurshp, PD

Course Description
Covers shape description; conventions and symbols; size description; notes and instruction associated with manufacturer's and maintenance-related drawings, including castings, weldments, and machined parts; electrical/electronic schematics and ladder diagrams; piping and fluid power-related drawings and schematics; structural and architectural drawings; and sheet-metal and plant layout. For apprentices and trainees in industrial plant maintenance trades.

Course Pre-requisite(s)
TAGD110 Basic Shape & Size Interpret or Instructor Permission

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
20

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Tolerances
2. Fits and Holes
3. Fasteners
4. Inclined/Oblique Surfaces
5. Auxiliary Views
6. Pictorial Drawings
7. Castings and Weldments
8. Assembly Drawings (Machine Parts)
9. Electronics and Electrical Schematics
10. Piping Diagrams and Fluid Power Circuits
11. Structural Drawings and Prints
12. Architectural Drawings and Prints
13. Sheet Metal Drawings and Layouts
14. Plant Layout Drawings and Prints

Calculate tolerances, clearance and interference fits, and sizes for shafts and holes.
Select correct fasteners for industrial applications.
Identify inclined, oblique, and auxiliary surfaces and views on blueprints.
Explain machine assembly from pictorial and assembly drawings.
Identify specific parts from weldment, casting, electronic, electrical, piping, and fluid power prints.
Identify specific structural steel components from structural, architectural, and plant layout drawings.
Sketch and develop sheet metal layouts.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
All students will be required to complete a comprehensive final exam that assesses the learning of all course objectives. This exam must be weighted in a manner so that the exam is worth a minimum of fifteen percent of the final grade. This exam is to be a common exam administered to all sections of TAMT115 Maintenan Trades Print Reading.

General Course Requirements and Recommendations
Calculator use: Students are encouraged to bring a calculator to all classes. Any scientific calculator will be sufficient for this course.

Texts
Texts, handouts, and/or workbooks will be determined by the TAE Department.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for TAMT 115

TAMT123 - Maint Print Read: Struct Steel & Convey

Overview

Subject
Skilled Trade & Apprenticeship

Academic Department
Skilled Trade and Apprentice Education

School
Business, Entrepreneurshp, PD

Course Description
Explores how to create a basic shop drawing of structural steel shapes and perform print reading of conveyor structures. Also introduces structural steel detail drawings and how print reading techniques relate to conveyors. Requires the purchase of the following materials for use during week 6 and beyond: 1/4" grid drawing paper, triangles (45 and 30 -60 -90), ruler/architects scale, eraser, scissors, rubber cement, colored pencils or highlighters, and drawing pencils (H and HB lead).

Course Pre-requisite(s)
TAGD110 Basic Shape & Size Interpret, TAMA120 Indust Appl of Algebraic Princ, or Instructor Permission

Credit Hours
2

Total Contact Hours

Total Instructor Contact Hours:
32

Total Student Contact Hours:
32

Course Fee
20

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Use of steel charts and identification of structural steel terms.
2. Simple stresses.
3. Bending moment, section modulus, and beam selection.
4. Fasteners (bolts).
5. Welding symbols and strength of welds.
6. Drawing of a seated beam.
7. Drawing of a framed beam.
8. Drawing of a column.
9. Print reading: monorail conveyors.
10. Print reading: power and free conveyors.
11. Print reading: bucket elevators.
12. Print reading: chain conveyors.
13. Print reading: belt conveyors.
14. Dimensional guidelines for conveyor installations.

Utilize manuals, tables, and charts to locate structural steel member data.
Determine the size of simple beams and columns.
Calculate the loads applied to fasteners and specific types of welds.
Draw simple beams and columns using traditional techniques.
Identify the basic conveyor components.
Demonstrate how to successfully read drawings which show various conveyor layouts.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
All students will be required to complete a common TAMT123 Main Print Read: Struct Steel comprehensive final examination that assesses the learning of all course objectives. This exam must be weighted in a manner so that this exam score is worth a minimum of fifteen percent of the final course grade.

General Course Requirements and Recommendations
Students will be required to bring the following drawing equipment beginning in the sixth week: ¼" grid drawing paper, triangles (45° and 30°-60°-90°), ruler/architects scale, eraser, scissors, rubber cement, colored pencils or highlighters, and drawing pencils (H and HB lead).
Texts
Texts, handouts, and/or workbooks will be determined by the TAE Department.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for TAMT 123

TAMT126 - Maintenance Print Reading: Plant Layout

Overview

Subject
Skilled Trade & Apprenticeship

Academic Department
Skilled Trade and Apprentice Education

School
Business, Entrepreneurshp, PD

Course Description
Introduces the techniques and procedures of plant layout and material handling. Discusses how to analyze and develop information in order to produce a plant layout. Covers print reading skills with emphasis on industrial equipment drawings and how to make simple plant layout drawings for the production of a part using basic drafting techniques.

Course Pre-requisite(s)
TAGD110 Basic Shape & Size Interpret or Instructor Permission

Credit Hours
2

Total Contact Hours
Total Instructor Contact Hours:
32

Total Student Contact Hours:
32

Course Fee
20

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Plant layout and material handling.
2. Process design.
3. Flow analysis techniques.
4. Workstation layout – space requirements.
5. Material handling equipment – print reading review of conveyors: monorail, chain, and roller.
6. Print reading: plant layout.
7. Print reading: machinery layout.
8. Development of a plant layout.
9. Print reading: exhaust systems.
10. Print reading: drum and monorail washers.
11. Print reading: machine support frame details.
12. Print reading: catwalks, platforms, and crossover stairways.

Plan a plant layout.

Explain what factors are required for a production process.

Draw a plant layout of a production process.

Demonstrate a familiarity of various industrial equipment in order to showcase basic print reading skills.

Read plant layout drawings which shows various industrial plant equipment.

Utilize various drawings of example industrial equipment to develop print reading skills.

Develop organizational skills in making and reading a plant layout.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
All students will be required to complete a common TAMT126 Main Print Read: Plant Layout comprehensive final examination that assesses the learning of all course objectives. This exam must be weighted in a manner so that this exam score is worth a minimum of fifteen percent of the final course grade.

General Course Requirements and Recommendations
Students will be required to bring the following drawing equipment beginning in the eighth week: ¼" grid drawing paper, triangles (45° and 30°-60°-90°), ruler/architects scale, eraser, scissors, rubber cement, colored pencils or highlighters, and drawing pencils (H and HB lead).
Texts
Texts, handouts, and/or workbooks will be determined by the TAE Department.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for TAMT 126

TAMT200 - Predictive Maintenance Shaft Align & Cou

Overview

Subject
Skilled Trade & Apprenticeship

Academic Department
Skilled Trade and Apprentice Education

School
Business, Entrepreneurshp, PD

Course Description
Provides specialized instruction in the practices and equipment used in shaft alignment, and the end-to-end and parallel alignments of machines. Explores machine failures due to rotating shaft misalignment and vibration created from shaft center lines not being in the same plane. Covers inefficiencies and increased wear due to misalignment, shaft alignment methods, soft foot, thermal growth, rim, face, reverse dial indicator, and MPT couplings.

Course Pre-requisite(s)
TAMT110 Mechanical Power Transmission or Instructor Permission

Credit Hours
2

Total Contact Hours
Total Instructor Contact Hours:
32

Total Student Contact Hours:
32

Course Fee
15

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Introduction to shaft alignment and shaft misalignment effect of machinery.
2. Solid couplings, alignment equipment, and tools.
3. Flexible couplings, site preparationm and the rough alignment procedure.
4. Rough alignment procedure (horizontal).
5. Grid couplings, and rim and face alignment procedure (vertical).
6. Rim and face alignment procedure (horizontal).
7. Rubber insert couplings and reverse dial indicator alignment procedure.
8. Reverse dial indicator graphing techniques.
9. Chain couplings and visible laser alignment procedure.
10. Thermal growth patterns in machinery and graphing techniques.
11. Multi-shaft alignment procedures.
12. Proper coupling selection, installation, and alignment.

Identify the various misalignment types.

Perform the basic site preparation procedure.

Identify and correct the condition of soft foot.

Solve problems using the shim formula.

Calculate expansion/contraction problems with relation to shaft alignment.

Identify the tolerances allowed for a specific machinery application and correctly chose the proper coupling required.

Demonstrate the rough alignment procedure.

Demonstrate the rim and face alignment procedure.

Demonstrate the reverse dial indicator alignment procedure.

Demonstrate the visible laser alignment procedure.

Explain the theory of thermal growth patterns in machinery.

Identify, install, and disassemble the various couplings used in MPT systems.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
All students will be required to complete a comprehensive final examination that assesses the learning of all course objectives. This exam will consist of two parts, the first part consisting of a written portion and the second part will be an actual shaft alignment. This exam must be weighted in a manner so that this exam score is worth a minimum of fifteen percent of the final course grade. This exam is to be a common exam administered to all sections of TAMT200 Predictive Maint Shaft Align.

General Course Requirements and Recommendations
Calculator Use: Students are encouraged to bring a calculator to all class sessions. Any scientific calculator will be sufficient for this course.

Texts
Texts, handouts, and/or workbooks will be determined by the TAE Department.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for TAMT 200

TAMT210 - Predictive Maintenanc Vibration Analysis

Overview

Subject
Skilled Trade & Apprenticeship

Academic Department
Skilled Trade and Apprentice Education

School
Business, Entrepreneurshp, PD

Course Description
Provides specialized instruction in diagnosing and resolving machinery vibration in rotating equipment, the most cost-effective methods to reduce maintenance costs, and how to extend machinery life.

Course Pre-requisite(s)
TAMT110 Mechanical Power Transmission, TAMT200 Predictive Maint Shaft Align, Instructor Permission

Credit Hours
2

Total Contact Hours
Total Instructor Contact Hours:
32

Total Student Contact Hours:
32

Course Fee
15

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Vibration analysis and machine vibration.
2. History of vibration analysis, and preventive and predictive maintenance.
3. Predictive maintenance philosophy.
4. Types of machine vibration.
5. Vibration characteristics.
6. Vibration types and data.
7. Vibration terms.
8. Process of vibration analysis.
9. Hardware and software.
10. Imbalance vibration.
11. Misalignment vibration.
12. Bearing fault vibration.
13. Resonance.
14. Advanced analysis techniques.

Explain the benefits of a vibration analysis, predictive maintenance program.

Identify the sources of vibration.

Identify and successfully demonstrate the various types of equipment used to detect vibration.

Explain the meaning of frequencies as it relates to vibration.

Explain the meaning of resonance as it relates to vibration.

Identify the phase and amplitude symptoms of coupling misalignment.

Identify vibration due to rolling element bearings.

Identify vibration due to imbalance.

Explain the effects of gear vibration.

Identify the point in time to call for vibration expertise.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of student achievement may include lab assignments, quizzes, and exams.

Texts
Texts, handouts, and/or workbooks will be determined by the TAE Department.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for TAMT 210

TAMT220 - Advanced Rigging

Overview

Subject
Skilled Trade & Apprenticeship

Academic Department
Skilled Trade and Apprentice Education

School
Business, Entrepreneurshp, PD

Course Description
Presents safe rigging practices and equipment used by mechanical trades people. Covers fiber and wire rope, block and tackle, lift and rigging chain, proof test, safe working load, design factor, sling geometry, fittings, and lifting and moving equipment.

Course Pre-requisite(s)
TAMA130 Indust Appl Geometric Prin or Instructor Permission

Credit Hours
2

Total Contact Hours
Total Instructor Contact Hours:
32

Total Student Contact Hours:
32

Course Fee
20

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Introduction to lab procedures and rigging overview.
2. Planning for a lift.
3. Fiber and synthetic-fiber rope.
4. Wire rope.
5. Wire rope, chain fittings, and endings and hooks.
6. Basics of wire, chain, wire mesh, and synthetic slings and hitches.
7. Angle of inclination, resultant stress, and headroom.
8. Design of spreader bars.
9. Equipment for pulling and drifting loads.
10. Types of hoists and cranes, signaling, and lifting capacities.
11. Scaffolds, ladders, man lifts, and safety devices.
12. Practical rigging problems.
13. Team project planning.

Explain the properties and limitations of fiber rope.

Explain the properties and limitations of synthetic rope.

Demonstrate and explain the uses and limitations of wire rope.

Demonstrate and explain the uses and applications of lift and load chain.

Identify the uses and applications of rigging accessories.

Explain the procedures to make a planned move or lift.

Demonstrate and explain the principles of slings.

Demonstrate and explain the types of hook-ups.

Demonstrate correct crane signals.

Calculate loads and sling angles.

Explain OSHA regulations and their impact on planned rigging moves or lifts.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
All students will be required to complete a comprehensive final examination that assesses the learning of all course objectives. This exam will consist of two parts, the first part consisting of a written portion and the second part will be an actual rigging assignment. This exam must be weighted in a manner so that this exam score is worth a minimum of fifteen percent of the final course grade. This exam is to be a common exam administered to all sections of TAMT220 Advanced Rigging

General Course Requirements and Recommendations
Calculator Use: Students are encouraged to bring a calculator to all class sessions. Any scientific calculator will be sufficient for this course.

Texts
Texts, handouts, and/or workbooks will be determined by the TAE Department.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for TAMT 220

TAMT260 - Gearing

Overview

Subject
Skilled Trade & Apprenticeship

Academic Department
Skilled Trade and Apprentice Education

School
Business, Entrepreneurshp, PD

Course Description
Discusses the calculation of standard American National, United States V, Metric, Acme, and Worm screw threads. Covers standard notations and formulas for spur gears, bevel gears, worm and worm wheels, and helical gears. Also explains replacement of spur gears with helical gears, the use of idler gears, and discusses calculations for plain and differential indexing.

Course Pre-requisite(s)
TAMA200 Indust Appl Trigonomic Princip or Instructor Permission

Credit Hours
2

Total Contact Hours
Total Instructor Contact Hours:
32

Total Student Contact Hours:
32

Course Fee
3

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Gear ratios and lead screws.
2. Compound gearing.
3. Screw threads.
4. Spur gears and circular pitch.
5. Bevel gears.
6. Miter gears.
7. Worm gears.
8. Parallel shaft gearing.
9. Angular shaft gearing.

Solve problems involving standard screw threads using standard notation and formulas.

Solve gear ratio problems.

Assemble a gearbox involving spur gears.

Assemble a gearbox involving bevel gears.

Assemble a gearbox involving worm gears.

Calculate and replace a spur gear set with a bevel gear set.

Solve problems involving duplication of gears, shaft angles of less than or greater than 90 degrees and replacing spur gears with helical gears.

Inspect a gearbox for wear and damage.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
All students will be required to complete a comprehensive final examination that assesses the learning of all course objectives. This exam must be weighted in a manner so that this exam score is worth a minimum of fifteen percent of the final course grade. This exam is to be a common exam administered to all sections of TAMT260 Gearing.

General Course Requirements and Recommendations
Calculator Use: Students are encouraged to bring a calculator to all class sessions. Any scientific calculator will be sufficient for this course.

Texts
Texts, handouts, and/or workbooks will be determined by the TAE Department.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for TAMT 260

TAPI105 - Intro to Industrial & Pneumatic Controls

Overview

Subject
Skilled Trade & Apprenticeship

Academic Department
Skilled Trade and Apprentice Education

School
Business, Entrepreneurshp, PD

Course Description
Introduces the basic principles and techniques used in the measuring and controlling of an industrial process. Stresses measuring, tuning, and calibration of pneumatic instrumentation and controls. Examines pressure, temperature level, flow, and analytic control systems. Covers fundamental control techniques including open loop and closed loop control, and three modes of control - cascade, adaptive, feed forward, and feedback. Studies fundamental methods of calibration and repair of pneumatic controllers, transducers, transmitters, and control valves. Laboratory activities.

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
30

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Introduction: safety, measurement principles, and instrument and control applications.
2. Process control.
3. Temperature measuring devices: pressure, level, flow, and analytic.
4. Automatic control.
5. Automatic control simulations.
6. Control integration: measuring devices and automatic control.
7. Principles and techniques of calibration basic errors.
8. Pneumatic equipment calibration.
9. Control valves.
10. Positioners.

Describe the differences between on-off control and modulating control.

Describe the parts of a control loop.

Identify and describe the purpose of each component in a closed loop.

Draw a control loop using the proper ANSI/ISA symbols.

Describe flow, temperature, pressure, analytic, and level control.

Calculate the transfer function.

Use standard instrumentation test equipment properly.

Relate transfer function in standard instrumentation signals.

Describe the use of final control elements in a closed loop.

Demonstrate safe working practices.

Describe the fundamentals of equipment calibration.

Calibrate a transducer, transmitter, controller, and recorder.

Use a P&ID to trace a pneumatic circuit.

Troubleshoot, repair, and calibrate a pneumatic instrument.

Maintain, repair, and bench calibrate a pneumatic control valve and positioner.

Describe types and dynamics of control valves.

Select a control valve using a computer program.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Methods for measuring achievement of objectives:

1. Tests will be given throughout the semester. Tests scores represent 50% of the course grade.

2. Laboratory activities and performance exercises will be done where students will demonstrate an understanding of practical applications. These will make up 25% of the course grade.
3. A written final exam will be given which will represent 25% of the course grade.

Texts
Texts, handouts, and/or workbooks will be determined by the TAE Department.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for TAPI 105

TAPI120 - Instrumentation: Print Reading

Overview

Subject
Skilled Trade & Apprenticeship

Academic Department
Skilled Trade and Apprentice Education

School
Business, Entrepreneurshp, PD

Course Description
Explores drawing, reading, and interpreting standard instrumentation and electrical drawings, diagrams, and schematics. Emphasizes using ANSI, ISA, SAMA, and IEEE standard symbols and other accepted industry protocols. Also stresses appropriate techniques in using drawings, diagrams, and schematics to troubleshoot and locate equipment.

Course Pre-requisite(s)
TAPI105 Intro Indust & Pneumatic Ctrls or Instructor Permission

Credit Hours
2

Total Contact Hours
Total Instructor Contact Hours:
32

Total Student Contact Hours:
32

Course Fee
20

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics
1. Introduction: diagram and drawing standards.
2. Symbols library and drawing standards.
3. Drawing standards and sources.
4. ISA and SAMA standards: process and instrument drawings, lab b loop tracing.
5. Instrumentation drawings and diagrams: electrical diagrams.
6. Wiring diagram and loop diagram.
7. Piping diagrams: hydraulic diagrams.
8. Blueprint reading: control valve sectional (lab).
9. Sheet metal dawings: ventilation systems.
10. Building drawings: locating components in drawings.
11. Plant floor: locating component in plants.

Draw a loop diagram.
Select the appropriate diagram to use in troubleshooting a problem.
Explain the use of drawings and symbols as a means of communication.
Compare the different parts of a diagram.
Interpret instrument components in an instrument diagram.
Locate equipment in a facility using a standard drawing.
Interpret electrical diagrams and schematics.
Develop a drawing using a supplied details.
Describe the operation of a system using a ladder diagram.
Trace a signal path on a standard diagram.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Methods for measuring achievement of objectives:

1. Tests will be given throughout the semester. Tests scores represent 50% of the course grade.
2. Laboratory activities and performance exercises will be done where students will demonstrate an understanding of practical applications. These will make up 25% of the course grade.
3. A written final exam will be given which will represent 25% of the course grade.

Texts
Texts, handouts, and/or workbooks will be determined by the TAE Department.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for TAPI 120

TAPP100 - Fundamentals of Plumbing & Pipefitting

Overview

Subject
Skilled Trade & Apprenticeship

Academic Department
Skilled Trade and Apprentice Education

School
Business, Entrepreneurshp, PD

Course Description
Explains the development of the proper procedures for the sizing, selection, and installation of pipe and fittings. Includes the development of pipe welding templates and bending of tubing and pipe.

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
40

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Orientation, course review, math refresher, and piping pointers.
2. Pipe measuring methods, fitting take-off.
3. 45-degree offsets, overview of piping systems.
4. Threading pipe and metallic piping materials in a pipe threading lab.
5. Nonmetallic piping.
6. Tubing, metallic, and nonmetallic in a tubing lab.
7. Hoses.
8. Pipe fittings in a copper soldering lab.
9. Common valves, design, and application.
10. Special valves, design, and application in a valve repack lab.
11. Strainers, filters, and traps in a PVC pipe lab.
12. Piping accessories.
13. Cross connection control and backflow prevention.

Explain the safety practices for bending, cutting, and installing pipe and tubing.

Describe the procedures for laying out pipe for cutting.

Describe and practice the necessary calculations for correctly sizing pipe.

Describe, discuss, and perform the necessary calculations to determine cut size of various pipe materials.

Describe the proper procedures for cutting pipe with hand and power tools.

Describe and demonstrate the proper procedures for bending pipe and tubing.

Solve practical shop exercises in the bending of pipe and tubing.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
All students will be required to complete a comprehensive final examination that assesses the learning of all course objectives. This exam must be weighted in a manner so that this exam score is worth a minimum of fifteen percent of the final course grade. This exam is to be a common exam administered to all sections of TAPP100 Fund of Plumbing & Pipefitting.

Texts
Texts, handouts, and/or workbooks will be determined by the TAE Department.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for TAPP 100

TAPP110 - Drains, Wastes, and Vents

Overview

Subject
Skilled Trade & Apprenticeship

Academic Department
Skilled Trade and Apprentice Education

School
Business, Entrepreneurshp, PD

Course Description
Discusses how to properly select materials for the installation and repair of sewer, soil, waste, and vent systems. Covers proper procedures for the design and layout of residential and commercial systems, and the use of blueprints and isometric diagrams.

Credit Hours
2

Total Contact Hours
Total Instructor Contact Hours:
32

Total Student Contact Hours:
32

Course Fee
30

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Safety protocols and introduction to plumbing principles.
2. Plumbing blueprint reading, symbology, and application of isometrics.
3. Using blueprints and cross connections - definition and applications.
4. Plumbing materials used in residential and commercial applications, special fittings, and specific materials restrictions as per codes.
5. Specialty plumbing tools for installation of no-hub, cast-iron, and flexible plumbing.
6. Introduction to gas piping in buildings, materials and safety applications, sizing procedures for gas branches and mains.
7. Applications - gas mains and branches.
8. Calculations for the sizing of storm and sanity drains.
9. Joining and installation procedures for drains and sizing procedures for roof and parking lot drains.
10. Plumbing fixtures, application and installation procedures, plumbing traps, and types and restrictions.
11. Calculations for the sizing of water supply piping.
12. Specialty fixtures, water fountains, slop sinks, hot water heaters, and installation procedures for specialty fixtures.
13. Testing, inspecting of plumbing systems, and principles of rough and finish plumbing.

Explain the proper layout of plumbing systems.

Select the proper size of building drains and vents using Michigan and local code requirements.

Discuss and demonstrate techniques for renovating plumbing systems.

Demonstrate the proper techniques for testing backflow preventers.

Discuss and describe the proper procedures for doing material take-offs from blueprints.

Demonstrate the use of isometric diagrams.

Solve practical shop exercises in the proper layout and design of sewer, soil, waste and vent systems.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
All students will be required to complete a comprehensive final examination that assesses the learning of all course objectives. This exam must be weighted in a manner so that this exam score is worth a minimum of fifteen percent of the final course grade. This exam is to be a common exam administered to all sections of TAPP110 Drains, Wastes, & Vents.

Texts
Texts, handouts, and/or workbooks will be determined by the TAE Department.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for TAPP 110

TAPP120 - Heating Systems

Overview

Subject
Skilled Trade & Apprenticeship

Academic Department
Skilled Trade and Apprentice Education

School
Business, Entrepreneurshp, PD

Course Description
Introduces the principles of steam and hydronic heating systems. Covers proper sizing and selection of converters, traps, and boilers.

Credit Hours
2

Total Contact Hours

Total Instructor Contact Hours:
32

Total Student Contact Hours:
32

Course Fee
40

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Principles of heat flow in a building and use and application of heat charts and formulas.
2. Heat loss calculations.
3. Planning a heating systems.
4. Steam heating systems, one-pipe, two-pipe and vacuum systems, and steam traps.
5. Steam heating system design and placement of pipe and specific connections.
6. Class project-steam heating design.
7. Hot water heating systems, direct-return, reverse-return, and air control and vents.
8. Radiant panel heating panels, hot water boilers, and controls.
9. Boiler fitting, valves, steam gauges, injectors, and relief valves.
10. Design of a radiant heat system.
11. Series loop and one zone system.
12. One pipe system.
13. Two pipe reverse return system.

Describe and discuss the principles of heat loss in a structure.

Identify the difference between steam and hot water systems.

Identify the procedures for laying out functioning heating systems.

Identify when to choose one type of system over another.

Review the different types of systems according to their pipe arrangements.

Identify and discuss the required safety equipment on boilers and furnaces.

Design and layout steam and hydronic systems.

Identify the proper safety procedures for working around boilers and furnaces.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
All students will be required to complete a comprehensive final examination that assesses the learning of all course objectives. This exam must be weighted in a manner so that this exam score is worth a minimum of 15 percent of the final course grade. This exam is to be a common exam administered to all sections of TAPP120 Heating Systems.

Texts
Texts, handouts, and/or workbooks will be determined by the TAE Department.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for TAPP 120

TAPP250 - Plumbing Code

Overview

Subject
Skilled Trade & Apprenticeship

Academic Department
Skilled Trade and Apprentice Education

School
Business, Entrepreneurshp, PD

Course Description
Introduces the use and application of the Michigan Mechanical Plumbing Code. Covers how to review each article of the code for content and application, and how to interpret plans and drawings as related to plumbing and pipefitting.

Course Pre-requisite(s)
TAPP100 Fund of Plumbing & Pipefitting or Instructor Permission

Credit Hours
2

Total Contact Hours

Total Instructor Contact Hours:
32

Total Student Contact Hours:
32

Course Fee
30

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Review of code regulations and terms.
2. Principles of plan review.
3. Quality and weights of selected materials.
4. Joints and connections.
5. Drainage systems.
6. Strom drains.
7. Vents and venting.
8. Traps, interceptors, and backflow preventers.
9. Plumbing fixtures.
10. Water supply.
11. Plumbing layouts.
12. Drainage layouts.
13. Venting designs.
14. Inspection, tests, and maintenance.

Interpret building plumbing and pipefitting diagrams using accepted conventions.

Identify which article applies to a given situation.

Select the correct material for a plumbing or pipe-fitting job.

Cite articles and sub-articles from the code that apply to a given situation.

Layout and size a plumbing system according to the code.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
All students will be required to complete a comprehensive final examination that assesses the learning of all course objectives. This exam must be weighted in a manner so that this exam score is worth a minimum of fifteen percent of the final course grade. This exam is to be a common exam administered to all sections of TAPP250 Plumbing Code.

Texts
Texts, handouts, and/or workbooks will be determined by the TAE Department.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for TAPP 250

TAPT100 - Introduc to Process Technology Practices

Overview

Subject
Skilled Trade & Apprenticeship

Academic Department
Skilled Trade and Apprentice Education

School
Business, Entrepreneurshp, PD

Course Description
Provides an overview of process-based manufacturing industries with a focus on process technology operations using a systems perspective. Includes concepts of safety, process instruments, environmental standards, and continuous process improvement.

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
100

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Course overview
2. History of the process industries
3. Your career as a process technician
4. Working on teams
5. Basic physics
6. Basic chemistry
7. Safety, health, and the environment
8. Principles of quality
9. Piping and valves
10. Tanks, drums, and vessels
11. Pumps
12. Compressors
13. Stream turbines
14. Electricity and motors
15. Heat exchangers
16. Cooling towers and fin fans
17. Furnaces
18. Boilers
19. Distillation
20. Process instrumentation control
21. Process utilities
22. Process auxiliaries
23. Process print reading

Explain the growth and development of the process industry.

Report the impact of the process industry on American society.

Identify industry responses to current issues and trends.

Explain and describe the responsibility of the various regulatory agencies as they relate to the process industry.

Describe the roles, responsibilities, and expectations of the process technician.

Describe the differences between work groups and teams.

Describe the different types of teams encountered in the process industry.

Define the application of physics in the process industry.

Define the application of chemistry in the process industry.

Discuss the safety, health, and environmental hazards found in the process industries.

Identify responses in the process industry to quality issues.

Describe the purpose and function of piping and valves in the process industries.

Describe the purpose or function of tanks, drums, and vessels in the process industries.

Describe the purpose or function of pumps, compressors, and steam turbines in the process industries.

Explain the difference between AC and DC current.

Describe the purpose or function of heat exchangers, furnaces, boilers, cooling towers, and distillation towers in the process industries.

Describe the purpose or function of process control instrumentation in the process industries.

Discuss the different types of process utilities and their applications.

Describe the purpose or function of the different process auxiliary systems and their applications.

Describe the purpose or function of process systems drawings.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Students will be required to complete Chapter Reviews as assigned. Each Chapter Review will have an assigned point value.
Students will be administered four online Module Exams. Module Exams will cover specific course material as assigned.
Students will be required to participate in a minimum of four online discussions of select topics using an online Discussion Board.
Students will be administered an online comprehensive Final Exam.
Students will be required to maintain a student spreadsheet - recording attendance, Chapter Review scores, Discussion Board scores, Module Exam scores, and Final Exam score. Completed spreadsheet will be turned in and will be used as part of the calculation of the final grade.
The scores of the scheduled Chapter Reviews, Module Exams, Discussion Boards, Final Exam, and Student Spreadsheet will be used to calculate the semester grade.

Texts
Texts, handouts, and/or workbooks will be determined by the TAE Department.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for TAPT 100

TAPT110 - Process Technology Equipment

Overview

Subject
Skilled Trade & Apprenticeship

Academic Department
Skilled Trade and Apprentice Education

School
Business, Entrepreneurshp, PD

Course Description
Introduces students to the purpose, components, operation, and troubleshooting of the equipment used within the process industry.

Course Pre-requisite(s)
TAPT100 Intro to Process Tech Practice

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
45

Total Student Contact Hours:
45

Course Fee
100

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Departmental Exam, Portfolio Review, Licensure/certifications, Other

Credit for Prior College Level Learning (CPCLL) Details
This course is identified as a departmental course for which a learner can receive college credit for prior college-level learning and/or skills acquired outside the traditional classroom. Terms of the HFC Credit for Prior College-Level Learning Policy may be met by review of the appropriate documentation, skill, certifications, and/or knowledge acquired by the learner and submitted for evaluation by the appropriate departmental faculty.

As required, one or more of the following may be considered in the evaluation process:

1. Field experience
2. Licenses held
3. Completing course exams
4. Performance sequences
5. Competing a portfolio
6. Assessment of private trade school or other extensive college level industry training and learning by a departmental faculty member.

Goals, Topics, and Objectives

Core Course Topics

1. Introduction to equipment tools and process drawings
2. Piping, tubing, hoses, and fittings
3. Valves
4. Pumps
5. Compressors
6. Turbines
7. Motors and engines
8. Power transmission and lubrication
9. Heat exchangers
10. Furnaces and boilers
11. Cooling towers
12. Filters and dryers
13. Extruders
14. Vessels

Describe the equipment and equipment operations common to the processing industry.
Describe safety and environmental concerns associated with the industry.
Describe and analyze the importance of plant equipment maintenance and predictive/preventive maintenance procedures in the industry.
Describe and evaluate the process technician's role in performing maintenance tasks.
Describe the purpose and components of piping, tubing, hoses, and fittings in the process industry.
Explain the purpose and components of common valves used in process technology.
Describe the purpose of pumps in the refining and petrochemical industries.
Describe the purpose of compressors in the refining and petrochemical industries.
Identify the common types/applications of compressors, turbines, heat exchangers, furnaces and boilers, cooling towers, filters and dryers, extruders, and vessels used in the process industry.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement

1. Tests will be given throughout the semester.
    - Test scores represent 50% of the course grade.
2. Laboratory activities and performance exercises will be done where students will demonstrate an understanding of practical applications.
    - Laboratory activities represent 25% of the course grade.
3. Written final exam
    - Final Exam represents 25% of the course grade.

Texts
Texts, handouts, and/or workbooks will be determined by the TAE Department.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for TAPT 110

TAPT120 - Introduction to Process Instrumentation

Overview

Subject
Skilled Trade & Apprenticeship

Academic Department
Skilled Trade and Apprentice Education

School
Business, Entrepreneurshp, PD

Course Description
Studies physical and chemical variables and the various instruments used to sense, measure, transmit, and control these variables. Introduces control loops and their components including controllers, regulators, sensors, and final control elements. Also discusses how to create instrumentation drawings and diagrams when developing and analyzing control loops.

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
100

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Portfolio Review

Credit for Prior College Level Learning (CPCLL) Details
Portfolio must contain evidence that illustrates competency in **all** course learning objectives. Department faculty will evaluate submitted portfolios based on the evaluation rubric. Evaluation rubric and student checklist located in the Industrial Technology office.

Goals, Topics, and Objectives

Core Course Topics

1. Introduction to Instrumentation
2. Process Variables, Elements and Instruments; Pressure, Temperature, Level, and Flow
3. Miscellaneous Process Variables, Elements, and
4. Instruments: Analytical, Vibration, and Speed Based
5. Control Loops: An Introduction
6. Control Loops: Primary Sensors, Transmitters, Transducers, Controllers, and Final Control Elements
7. Diagrams, Symbols, and Sketches
8. Instrumentation Troubleshooting

Discuss the evolution and importance of process instrumentation to the chemical and refining industry.

Describe the major process variables controlled in the process industry.

Define terms associated with instrumentation.

Explain the relationship between common process variables.

Identify the most common pressure-sensing and pressure-measuring devices used in the process industry and how they operate.

Identify some of the most common temperature-sensing and temperature-measuring devices used in the process industry and how they operate.

Identify some of the most common level-sensing and level-measuring devices used in the process industry and how they operate.

Identify some of the most common flow-sensing and flow-measuring devices used in the process industry and how they operate.

Identify process instrumentation used to analyze process fluids and products in industrial processes, and describe two additional process variables -- speed and vibration -- as well as the instruments used to measure these variables.

Demonstrate an understanding of control loops and their elements along with the various signals that can be transmitted through different types of control.

Describe the control loop elements that sense, measure, convert, and transmit process variable information.

Identify five of the different types of controllers used in the process industry (local, remote, split range, cascade/remote setpoint, and ratio); describe their components and function.

Describe major components of a control valve and how the valve operates.

Identify symbols in process diagrams that represent equipment, instrumentation, and lines.

Demonstrate an understanding of instrumentation troubleshooting, including communication, calibration, proper tool use, safety, and environmental guidelines.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Methods for measuring achievement of objectives:

Tests will be given throughout the semester.

1. Tests scores represent 50% of the course grade.
2. Laboratory activities and performance exercises will be done where students will demonstrate an understanding of practical applications. These will make up 25% of the course grade.
3. A written final exam will be given which will represent 25% of the course grade.

Texts
Texts, handouts, and/or workbooks will be determined by the TAE Department.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for TAPT 120

TAPT125 - Process Technology Instrumentation II

Overview

Subject
Skilled Trade & Apprenticeship

Academic Department
Skilled Trade and Apprentice Education

School
Business, Entrepreneurshp, PD

Course Description
Provides a review of microprocesser control components and control systems, power supplies, emergency shutdown procedures, and malfunctions. Examines switches, relays, and annunciator systems. Also covers covers signal conversion and transmission; controllers; and control schemes that maintain environmental regulations, energy efficiency, and quality of the process.

Course Pre-requisite(s)
TAPT120 Intro Process Instrumentation or Instructor Permission

Credit Hours
4

Total Contact Hours
Total Instructor Contact Hours:
62

Total Student Contact Hours:
62

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Portfolio Review

Credit for Prior College Level Learning (CPCLL) Details
Portfolio Review

Goals, Topics, and Objectives

Core Course Topics

1. Regulators, Switches, Relays, and Annunciators
2. Signal Transmission and Conversion
3. Controller and Control Modes
4. Advance Control Schemes
5. Control and Maintaining Process Quality, System Efficiency, and Environmental Standards
6. Microprocessor Control Systems and Components, Programmable Logic Controllers (PLC), and Distributed Control Systems (DCS)
7. Instrumentation Power Supply
8. Emergency Shutdown (ESD), Interlocks, and Protective Devices
9. Instrument Malfunctions and Troubleshooting

Compare the function and operation of regulators, switches, relays, and annunciators.

Calculate signal transduction and conversion.

Describe controllers, including their use in advanced control schemes.

Contrast microprocessor controls, such as Programmable Logic Controls (PLC) and Distributed Control Systems (DCS).

Discuss instrumentation power supplies.

Formulate emergency shutdown procedures (ESD), incorporating interlocks and protective devices.

Troubleshoot instrument malfunctions.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Methods for measuring achievement of objectives:

Tests will be given throughout the semester.

1. Test scores represent 50% of the course grade.
2. Laboratory activities and performance exercises will demonstrate student understanding of practical applications. These will make up 25% of the course grade.
3. A written final exam will be given, which will represent 25% of the course grade.

Texts
Texts, handouts, and/or workbooks will be determined by the TAE Department.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for TAPT 125

TAPT130 - Process Technology Systems

Overview

Subject
Skilled Trade & Apprenticeship

Academic Department
Skilled Trade and Apprentice Education

School
Business, Entrepreneurshp, PD

Course Description
Studies the interrelation of process equipment and process systems. Examines how to arrange process equipment into basic systems; describes the purpose and function of specific process systems; explains how factors affecting process systems are controlled under normal conditions; introduces the concept of system and plant economics; and explores how to recognize abnormal process conditions.

Course Pre-requisite(s)
TAPT100 Intro to Process Tech Practice or Instructor Permission

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
100

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Process Systems
2. Systems Overview, Potable and Fire Water Systems, Service/Utility and Waste Water Systems, and Cooling Water Systems
3. Instrument/Utility/Breathing Air Systems, and Nitrogen/Natural Gas/Fuel Gas Systems
4. Relief and Flare/Electrical Power Generation and Distribution Systems
5. Material Storage
6. Blending Systems
7. Refrigeration Systems
8. Steam Generation and Distribution Systems
9. Reaction Systems

Describe the purpose of a system.

Identify the basic equipment components found in a system.

Explain the purpose of equipment components found in a system.

Define terms associated with the system.

Explain the system theory of operation.

Analyze variables that must be controlled to ensure proper operation of the system.

Describe factors that affect normal system operation.

Identify system instrumentation.

Trace flows through a system on a process flow diagram.

Discuss the specific safety, health, and environmental concerns associated with the system.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Students will be required to complete Chapter Reviews as assigned. Each Chapter Review will have an assigned point value.
Students will be administered four online Module Exams. Module Exams will cover specific course material as assigned.
Students will be required to participate in a minimum of four online discussions of select topics using an online Discussion Board.
Students will be administered an online comprehensive Final Exam.
Students will be required to maintain a student spreadsheet - recording attendance, Chapter Review scores, Discussion Board scores, Module Exam scores, and Final Exam score. Completed spreadsheet will be turned in and will be used as part of the calculation of the final grade.
The scores of the scheduled Chapter Reviews, Module Exams, Discussion Boards, Final Exam, and Student Spreadsheet will be used to calculate the semester grade.
Texts
Texts, handouts, and/or workbooks will be determined by the TAE Department.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for TAPT 130

TAPT140 - Process Technology Quality

Overview

Subject
Skilled Trade & Apprenticeship

Academic Department
Skilled Trade and Apprentice Education

School
Business, Entrepreneurshp, PD

Course Description
Studies the quality manufacturing practices used within the process industry, including concepts such as operating consistency, continuous improvement, plant economics, team skills, and statistical process control (SPC).

Course Pre-requisite(s)
TAPT100 Intro to Process Tech Practice or Instructor Permission

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
100

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Portfolio Review

Credit for Prior College Level Learning (CPCLL) Details
Portfolio Review

Goals, Topics, and Objectives

Core Course Topics

1. Introduction to quality assurance.
2. Quality assurance tools and techniques.
3. Operating consistency principles and elements.
4. Statistical process control.
5. Cost elements of quality.
6. Principles of Lean Manufacturing and team-centered production.

Describe common quality practices of process-based manufacturing.

Explain operational consistency from a quality systems evaluation perspective.

Describe common continuous improvement and elements of process-based manufacturing.

Analyze operational cost factors as they relate to process industry cost models.

Design a SPC (Statistical Process Control) chart for a specific process element.

Evaluate the team skills demonstrated by a work team.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement

1. Chapter Reviews: Each Chapter Review will have an assigned point value.
2. Four online Module Exams: Module Exams will cover specific course material as assigned.
3. A minimum of four online discussions of select topics using an online Discussion Board.
4. An online comprehensive Final Exam.
5. Student spreadsheet: students will record attendance, Chapter Review scores, Discussion Board scores, Module Exam scores, and Final Exam score. Completed spreadsheet will be turned in and will be used as part of the calculation of the final grade.
6. The scores of the scheduled Chapter Reviews, Module Exams, Discussion Boards, Final Exam, and Student Spreadsheet will be used to calculate the semester grade.

Texts
Texts, handouts, and/or workbooks will be determined by the TAE Department.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for TAPT 140

TASM100 - Basic Sheet Metal Layout & Fabrication

Overview

Subject
Skilled Trade & Apprenticeship

Academic Department
Skilled Trade and Apprentice Education

School
Business, Entrepreneurshp, PD

Course Description
Covers layout, forming, and fabrication of basic sheet metal ductwork fittings and use of hand/power tools and equipment needed to accomplish various tasks. Explains how to fabricate square/round sheet metal ductwork, tapers, transitions, offsets, and how to fasten ductwork together.

Course Pre-requisite(s)
TAMA120 Indust Appl of Algebraic Princ or Instructor Permission

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
40

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Patterns of Pittsburgh seam and "s" or drive cleat.
2. Fittings.
3. End caps, plenum, filter box, flexible connections, roof curbs, hood, louvers, access doors, screen frames, drain pans, and drawbands.
4. Blank sizing, heavy metal, fire dampers, and role of the computer.
5. Duct system blueprint or drawing, abbreviations, types of systems, air requirements, and duct sizing.
6. Toolbox.

Demonstrate allowances for "s", drive clips, and Pittsburgh lock.

Demonstrate the process to make an "s" or drive clips.

Demonstrate how to layout sheet metal patterns.

Explain the proper and safe use of all tools and equipment to layout, form, and fabricate ductwork.

Demonstrate the proper use of foot/power shear, leaf brake, beading, and crimping machines.

Demonstrate how to make and use standing and grooved seams and safety hems.

Explain how to attach sheet metal fittings together through the use of "s"/drive clips, Pittsburgh lock, hammer lock, dove tail and dove tail/ beading.

Demonstrate how to make sheet metal gages, rough sketches of fittings and obtain the maximum use of sheet metal with proper layout practices.

Demonstrate how to square a piece of sheet metal.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
All students will be required to complete a comprehensive final examination that assesses the learning of all course objectives. This exam must be weighted in a manner so that this exam score is worth a minimum of 15 percent of the final course grade. This exam is to be a common exam administered to all sections of TASM100 Basic Sheet Metal & Fabricat.

Texts
Texts, handouts, and/or workbooks will be determined by the TAE Department.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for TASM 100

TASM120 - Sheet Metal Layout: Radial & Triangular

Overview

Subject
Skilled Trade & Apprenticeship

Academic Department
Skilled Trade and Apprentice Education

School
Business, Entrepreneurshp, PD

Course Description
Covers the development of geometrical elements of structures, their intersections by the radial line, triangulation methods of sheet metal layout, the drawing of development layouts, and the forming of cardboard or sheet metal models.

Course Pre-requisite(s)
TASM100 Basic Sheet Metal & Fabricat or Instructor Permission

Credit Hours
2

Total Contact Hours

Total Instructor Contact Hours:
32

Total Student Contact Hours:
32

Course Fee
15

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Layout problem for pipe and flange pipe.
2. Stretchouts for sections of the joint.
3. Stretchouts for sections of elbows.
4. Stretchouts with 3/8" lap seam.
5. Stretchouts with ¼" lap seam.
6. Stretchout of cap including location of support legs.
7. Layout plan and elevation.
8. Drop cheek elbow and reverse elbow.
9. Ogee offset.

Demonstrate radial line development through the use of a variety of problems utilizing geometric elements of structures.

Demonstrate the process to make a simple lap seam to fabricate cardboard or sheet metal models.

Apply shop problems to layout flanges and collars.

Explain the method of development through the use of a variety of problems including square to square, square to rectangle, round to round, square to round, square to oval, round to oval, etc.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
All students will be required to complete a comprehensive final examination that assesses the learning of all course objectives. This exam must be weighted in a manner so that this exam score is worth a minimum of 15 percent of the final course grade. This exam is to be a common exam administered to all sections of TASM120 Sheet Metal Radial & Triangula.

Texts
Texts, handouts, and/or workbooks will be determined by the TAE Department.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for TASM 120

TASM130 - Sheet Metal Layout: Appl Triangulation

Overview

Subject
Skilled Trade & Apprenticeship

Academic Department
Skilled Trade and Apprentice Education

School
Business, Entrepreneurshp, PD

Course Description
Covers the development of geometrical elements of structures by the triangulation method of sheet metal layout. Includes the development of stretchouts and making cardboard or sheet metal models of transition pieces.

Course Pre-requisite(s)
TASM120 Sheet Metal Radial & Triangula or Instructor Permission

Credit Hours
2

Total Contact Hours

Total Instructor Contact Hours:
32

Total Student Contact Hours:
32

Course Fee
15

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Layout elevation.
2. Plane views.
3. Layout profiles.
4. Triangulation.
5. Triangulation and triangulation simplified.

Demonstrate applied triangulation development through the use of a variety of problems utilizing geometric elements of structures.

Explain the triangulation method of development shortcuts through the use of a variety of transition problems including square to square, square to rectangle, round to round, square to round, square to oval, round to oval, etc.

Apply shop problems to develop geometric elements of structures.

Demonstrate how to size layout full and half pattern stretchouts.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
All students will be required to complete a comprehensive final examination that assesses the learning of all course objectives. This exam must be weighted in a manner so that this exam score is worth a minimum of 15 percent of the final course grade. This exam is to be a common exam administered to all sections of TASM130 Sheet Metal Appl Triangulation.

Texts
Texts, handouts, and/or workbooks will be determined by the TAE Department.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for TASM 130

TCM131 - Introduction to Telecommunication

Overview

Subject
Media Communication Arts

Academic Department
Media Communication Arts

School
Liberal Arts

Course Description
TCM (Telecommunication) is now MCA (Media Communication Arts). Please search for MCA-131 to register for this course. A survey course investigating the various electronic communication media, as well as print media, from historical, economic, ethical and social viewpoints.

Course Pre-requisite(s)
Eligible to take ENG courses at HFC.

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
10

Academic Level
Undergraduate

General Education Category
Humanities and Fine Arts

Michigan Transfer Agreement (MTA) Category
Category 5: Humanities and Fine Arts - Applied Degrees, Category 5: Humanities and Fine Arts - Transfer Degrees

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other Exam, Other

Credit for Prior College Level Learning (CPCLL) Details
Other Exam

Goals, Topics, and Objectives

Course Goals
To introduce and develop media literacy in students, by studying the history and major critical issues of the electronic and print media of today, especially in regard to the "consumption" of news but also entertainment as provided by the media monopolies and how it all affects our everyday lives and our relationships to our society and our world.

Core Course Topics

1. Mass Communication and Media Literacy
2. Convergence
3. Books
4. Newspapers
5. Magazines
6. Film
7. Radio and Recordings
8. Television, Cable, and Mobile Video
9. Video Games
10. Internet and World Wide Web
11. Public Relations and Advertising
12. Theories and Effects
13. Media Freedom, Regulation, and Ethics
14. Global Media

Define mass communication and relate how media literacy is critical and necessary in all aspects of it.
Explain the role of converging media in changing political and cultural dynamics on the local, national and global stage.
Illustrate the history of how print communication technologies originated and developed into what they are today (i.e. books, newspapers and magazines).
Illustrate the history of how electronic and digital communication technologies originated and developed into what they are today (i.e. film, radio, recordings, TV, cable and mobile video, social media, video games, Internet and world wide web). Identify the behind-the-scenes operations and decision-making processes of all major telecommunication industries.
Compare and contrast a variety of relationships between the media and their audiences, and analyze what the role of PR and Advertising has evolved into in the changing times.
Justify the general theory that media content provides insight into ourselves and our culture, and explain the value and importance in media effects research.
Know of the ongoing government regulation of the U.S. media, as well as the constitutional and principles that guide it.
Analyze the ethical and philosophical issues that arise in media culture, and contrast the range of viewpoints regarding each issue.
Develop and assess a realistic world view based on an appropriate plan for media use, and compare and differentiate global media with that of U.S. media.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Tests on key historical events, persons, laws, and theories. Evaluation of critical writing assignments.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for TCM 131

TCM132 - Film History and Criticism

Overview

Subject
Media Communication Arts

Academic Department
Media Communication Arts

School
Liberal Arts

Course Description
TCM (Telecommunication) is now MCA (Media Communication Arts). Please search for MCA-132 to register for this course. Introduces the film medium and the film experience as entertainment, artistic expression, and social communication, through examination of production techniques, critical theories, and historic & modern examples.

Course Pre-requisite(s)
Eligible to take ENG courses at HFC.

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
15

Academic Level
Undergraduate

General Education Category
Humanities and Fine Arts

Michigan Transfer Agreement (MTA) Category
Category 5: Humanities and Fine Arts - Applied Degrees, Category 5: Humanities and Fine Arts - Transfer Degrees

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other Exam, Other

Credit for Prior College Level Learning (CPCLL) Details
Skilled Demonstration Details

Skilled demonstration, given in department by department faculty. Faculty will assess demonstration based on evaluation rubric. Evaluation rubric and student checklist located in The School of Liberal Arts office.

Portfolio Review Details

Portfolio must contain evidence that illustrates competency in all course learning objectives not already measured through the skilled demonstration. Department faculty will evaluate submitted portfolios based on the evaluation rubric. Evaluation rubric and student checklist located in The School of Liberal Arts office.

Goals, Topics, and Objectives

Core Course Topics

1. The nature, magic and verisimilitude of the film experience.
2. The early inventors and their inventions that led to the motion picture.
3. The early films and their filmmakers, 1890--1915.
4. Genre and the three stages of film production.
5. Stages of filmmaking: Production, Distribution and Exhibition.
6. Continuity, D.W. Griffith, and the Hollywood System, 1915-1930.
7. Mise en scene, German Expressionism, and the introduction of "talkies" 1915-1930.
8. Montage, Editing and Russia in the 1920's.
9. The Hays Code, MPAA and ratings/censorship in film.
10. Hollywood's Golden Era, 1930-1950.
11. Italian Neo-Realism and the French New Wave, 1945-1965
12. Hollywood, the Rise of Independents and Foreign Films, 1950-1970.
13. The New Hollywood and American Independent Films, 1970-present.

Describe the medium of film in general and explain how verisimilitude critically affects one's perception of the experience.

Classify and outline the people and inventions that led to the creation and development of motion pictures.

Define and recognize the three major production techniques: Mise en scene, Montage, and Continuity. Interpret the role and impact of rating systems in both historical and present-day film world.

Describe the elements of the three stages of film production: Pre-Production, Production, and Post-Production.

Summarize and illustrate the three stages of filmmaking: Production, Distribution, and Exhibition.

Compare and contrast the two major production contexts: Hollywood and Independent. Summarizing and analyzing a feature film in writing.

Debate and defend a position on a film relative to social impact, overall filmic quality, and/or bankability.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement

- Quizzes over different areas of history, theory, and techniques
- Comprehensive exams over the above topics, as needed
- Critical Essays: Personal Film Experience, Feature Film Analysis, Style of a Director
- Short Viewing Reports on historic films

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for TCM 132

TCM151 - Digital Audio Editing

Overview

Subject
Media Communication Arts

Academic Department
Media Communication Arts

School
Liberal Arts

Course Description
TCM (Telecommunication) is now MCA (Media Communication Arts). Please search for MCA-151 to register for this course. Introduces digital audio editing using an industry standard software editing program on computers in the Telecommunication audio production labs. Covers both hardware and software issues, and explores how to perform short editing exercises.

Course Pre-requisite(s)
Eligible to take ENG courses at HFC. As this is a computer-based course, some basic knowledge of computer operations is highly recommended.

Credit Hours
1

Total Contact Hours

Total Instructor Contact Hours:
16

Total Student Contact Hours:
16

Course Fee
10

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
Other

Goals, Topics, and Objectives

Course Goals
The goal of this course is to be a successful tutorial introduction to a professional digital audio production software program, one that has intermediate to advanced features for multitrack recording, signal processing, mixing, and output. The same software program taught in this course is the key tool of production projects required in TCM251 Audio Production: Audio Production, which is why it will be a co-requisite for students enrolling in TCM251 Audio Production. This course can also be enrolled in by anyone in a non-251-linked section.

Core Course Topics

1. Overview of editing: definition, goals, major historical approaches.
2. The hardware needed for digital audio editing
3. The software platform in use: major function and features.
4. Industry standards and ethics in editing.

Explain the basic definition of Editing: Its purpose, goals and historical approaches.

Describe the necessary hardware and software minimally needed to accomplish professional quality digital audio editing.

Define and demonstrate the major functional procedure of the computer operating system in use.

Identify and give examples of the major features of the software program in use.

Demonstrate a knowledge of the major editing capabilities of the software program in use: such as levels and digitizing, editing voices, working with music, sound effects, processing, editing audio for video, and multi-track mixing.

Interpret a working knowledge of industry standards and ethics and justify what is needed for an audio project to be brought to that level.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement

1. Tests, over cognitive areas of hardware, software, and techniques.
2. Digital audio editing exercises: recording, cut & paste/trimming, processing, mixdown, and outputting to various digital formats.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for TCM 151

TCM157 - Digital Video Editing

Overview

Subject
Media Communication Arts

Academic Department
Media Communication Arts

School
Liberal Arts

Course Description
TCM (Telecommunication) is now MCA (Media Communication Arts). Please search for MCA-157 to register for this course. An intensive introduction to digital video editing, using an industry standard software editing program in the Telecommunication computer video lab. Covers both hardware and software issues, and explores how to complete short editing exercises.

Course Pre-requisite(s)
Eligible to take ENG courses at HFC. As this is a computer-based course, some basic knowledge of computer operations is highly recommended.

Credit Hours
1

Total Contact Hours

Total Instructor Contact Hours:
16

Total Student Contact Hours:
16

Course Fee
10

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
Other

Goals, Topics, and Objectives

Core Course Topics

1. Overview of editing: definition, goals, major historical approaches.
2. The hardware needed for digital video editing.
3. The computer operating system and software platform in use: major function and features.
4. The software program in use: major functions and features.
5. The three major types of editing: Mise en scene, Continuity, and Montage.
6. Industry standards and ethics of video editing.

Explain the basic definition of Editing: Its purpose, goals and historical approaches.

Describe the necessary hardware and software minimally needed to accomplish professional quality digital video editing.

Explain and demonstrate the major functional procedure of the computer operating system in use.

Describe and give examples of the major features of the software program in use.

Demonstrate the knowledge of the major editing capabilities of the software program in use: such as capturing, cut and paste, trimming, transitions, titling, special effects, audio sweetening, and output options such as digital file, DVD and uploading to the Internet.

Compare and contrast the three major types of editing: Mise en scene, Continuity, and Montage.

Interpret a working knowledge of industry standards and ethics, and evaluate what is needed for a video project to be brought to that level.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement

- Tests, over cognitive areas of hardware, software, and techniques.
- Digital video editing exercises: capturing, cut & paste/trimming, titling/transitions/special effects, audio sweetening, and outputting to various media formats.
- Verbal defense and debate of projects and how they relate to industry standards.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for TCM 157

TCM189 - WHFR Staff Training

Overview

Subject
Media Communication Arts

Academic Department
Media Communication Arts

School
Liberal Arts

Course Description
TCM (Telecommunication) is now MCA (Media Communication Arts). Please search for MCA-189 to register for this course. Provides an orientation to the non-commercial, educational radio station licensed to the college. Covers essential station rules and procedures, operation of equipment, and basic performance skills. Course is open to all students but is required of those who wish to join the staff and assist in the operation of WHFR.

Course Pre-requisite(s)
As there is computer use in this class, some knowledge of basic computer operations is highly recommended.

Credit Hours
1

Total Contact Hours

Total Instructor Contact Hours:
16

Total Student Contact Hours:
16

Course Fee
10

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. WHFR facts and management structure
2. WHFR rules and regulations
3. WHFR studio equipment and utilization
4. Public service and promotional announcements
5. FCC rules and regulations

Identify and describe in detail WHFR facts, WHFR management structure, WHFR rules and regulations, as well as FCC rules and regulations.

Operate the key studio recording equipment in a basic way.

Write an effective public service and promotional announcement.

Orally interpret and debate the ethical implications of FCC radio broadcast rules and regulation and potential misuse of the WHFR airwaves.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement

- Final exam over facts, management, and WHFR and FCC rules and regulations.
- Recording of a 30-minute DJ show.
- Writing a 30-second PSA and Promo scripts.
- Reviewing new music.
- Mentoring with a current DJ.
- Performing a voice check.
- Filling in a studio floorplan.
- Critiquing one hour of WHFR programming.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for TCM 189

TCM235 - Topics in Film Study

Overview

Subject
Media Communication Arts

Academic Department
Media Communication Arts

School
Liberal Arts

Course Description
TCM (Telecommunication) is now MCA (Media Communication Arts). Please search for MCA-235 to register for this course. Offers special study in an area of film, organized by theme, genre, historical period, or other criteria. Specific topics are listed in the semester class schedule; see individual course syllabi in the Communications division office.

Course Pre-requisite(s)
Eligible to take ENG courses at HFC.

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
15

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Major aspects of specific filmic topic/genre.
2. Historical examination of specific filmic topic/genre.
3. Thorough present-day analysis of specific filmic topic/genre as it relates to society and today's mass media culture.

Explain history, changes and popularity analysis of specific filmic topic/ genre.

Categorize, both verbally and in essay form, major aspects of specific filmic topic/genre.

Defend and debate social relevance and role in today's media culture as it relates to specific filmic topic/genre.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement

- Tests/quizzes of covered material through the semester.
- Graded group and individual analysis, both verbal and written, of evaluation on major topics related to genre.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for TCM 235

TCM241 - Media Writing

Overview

Subject
Media Communication Arts

Academic Department
Media Communication Arts

School
Liberal Arts

Course Description
TCM (Telecommunication) is now MCA (Media Communication Arts). Please search for MCA-241 to register for this course. Offers an analysis of and practice with the forms and formats of mass media script writing: commercial, promotional, public service, instructional, and dramatic.

Course Pre-requisite(s)
Eligible to take ENG courses at HFC.

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
15

Academic Level
Undergraduate

General Education Category
Humanities and Fine Arts

Michigan Transfer Agreement (MTA) Category
Category 5: Humanities and Fine Arts - Applied Degrees, Category 5: Humanities and Fine Arts - Transfer Degrees

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
Other

Goals, Topics, and Objectives

Core Course Topics

1. Mechanics of Media Writing
2. Radio Commercials
3. Television Commericials
4. Radio & TV Public Service Announcements and their Campaigns
5. TV Story Concepts
6. Dramatic Film Story Concept
7. TV Treatment
8. Adaptations
9. Dramatic Film Script: Treatment and First Act

Distinguish between the several major formats of radio, film & TV copy, and script writing.

Compose industry-standard radio and television commercials.

Justify specific radio and television public service campaigns and announcements.

Develop specific radio and television public service campaigns and announcements.

Break down the traditional dramatic elements and structure of story for both television and film.

Explain the traditional dramatic elements and structure of story for both television and film.

Execute professional mechanics and style of a television and/or feature film treatment.

Construct an adaptation from a work of written text.

Compose and defend components of Act 1 of a film script or TV pilot.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement

- Graded written radio and TV spot scripts, written IDs, public service announcements, and creative script creation.
- Graded small group classroom presentation of collaborative commercial campaign layouts.
- Measurement of verbal participation and description of creative campaigns from real-world analysis and debate.
- Measurement of verbal participation and description of TV and film examples from real-world analysis and debate.
- Review of portfolio of critical original work produced.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for TCM 241

TCM243 - Media Performance

Overview

Subject
Media Communication Arts

Academic Department
Media Communication Arts

School
Liberal Arts

Course Description
TCM (Telecommunication) is now MCA (Media Communication Arts). Please search for MCA-243 to register for this course. Offers study and practice in the skills required for successful communication from behind microphones and in front of cameras, with special attention on announcing, interviewing, and acting.

Course Pre-requisite(s)
Eligible to take ENG courses at HFC.

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
25

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
Other

Goals, Topics, and Objectives

Core Course Topics

1. Voice development
2. Analysis of Industry jobs and standards
3. Radio Commercials & PSAs
4. Character voice creation
5. Doubles and Tags
6. Radio News
7. TV Commercials & PSAs
8. Ensemble: TV Show--news magazine, interview or other
9. TV or Film Scene
10. The Business of Media Performance: Rules and Ethics

Evaluate and apply the core aspects of vocal and visual performance that affect and advance the development of vocals skills, in the context of microphone and camera recording.

Analyze industry jobs and trends through a variety of industry-offered media scripts as talent.

Prepare and perform a variety of radio scripts, such as commercials, PSA's, tags, doubles and news.

Prepare and perform a variety of teleprompter and memorized television scripts, such as commercials, PSAs, news, interview and dramatic.

Reconstruct a film/TV scene through performance and explain your choice of interpretation.

Identify and evaluate ethical and moral implications of the media performance business on individuals and society.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement

- Comprehensive Mid-term and Final exam on the pertinent theoretical and critical knowledge.
- Critiques both verbal and written of each individual and group performance as they take place with emphasis on student self-analysis as well as instructor critique and grading to industry standard.
- Overall review of portfolio of audio and video work performed.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for TCM 243

TCM251 - Audio Production

Overview

Subject
Media Communication Arts

Academic Department
Media Communication Arts

School
Liberal Arts

Course Description
TCM (Telecommunication) is now MCA (Media Communication Arts). Please search for MCA-251 to register for this course. A survey of the techniques of professional audio recording and playback, utilizing a variety of microphones and recorders, with editing done by dubbing and digital multi-track work using industry software, through production assignments in radio programming.

Course Pre-requisite(s)
TCM251 Audio Production, As this course has a computer-based component, some knowledge of basic computer operation is recommended.

Course Co-requisite(s)
TCM151 Digital Audio Editing

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
35

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
Other

Goals, Topics, and Objectives

Core Course Topics

1. Sound & Hearing
2. Microphones & Miking
3. Consoles & Mixing
4. Analog vs Digital Production
5. Digital recording formats
6. The computer as a digital studio and radio programming
7. Multitrack digital production
8. Saving and editing audio projects
9. Media Literacy in the business of sound

Identify and explain elementary principles of sound creation, transmission, and interpretation.

Identify and operate a variety of digital audio production equipment: microphones and miking

Identify and operate a variety of digital audio production equipment: consoles and mixing.

Evaluate the differences between analog and digital production formats.

Describe the major recording formats and the advantages of each.

Produce a basic digital short in a recorded segment.

Plan multitrack digital recording project.

Execute multitrack digital recording project.

Illustrate the basic saving and editing techniques for audio projects.

Evaluate the role of audio in mass media and its effect on media literacy/ believability of media content.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement

- Test over each content area
- Production projects

1. Commercial/PSA
2. Audio for Video Exercise
3. Digital Cut & Paste Exercise
4. Interview Recording and Editing Project
5. Digital multi-track recording and mix

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for TCM 251

TCM257 - Video Production I

Overview

Subject
Media Communication Arts

Academic Department
Media Communication Arts

School
Liberal Arts

Course Description
TCM (Telecommunication) is now MCA (Media Communication Arts). Please search for MCA-257 to register for this course. Introduces the basic concepts and skills of film and video production. The entire production process from script to editing is discussed and experienced with emphasis on key equipment and techniques. Differences between media are assessed and analyzed. Projects include individual and group work, both in the studio and on location.

Course Pre-requisite(s)
TCM157 Digital Video Editing, As some components of this course are computer-based, knowledge of basic computer operation is recommended.

Course Co-requisite(s)
TCM157 Digital Video Editing

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
62

Total Student Contact Hours:
62

Course Fee
50

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
Other

Goals, Topics, and Objectives

Core Course Topics

1. Film & video formats
2. Basic script requirements
3. Cameras & lenses
4. Basic lighting
5. Location production
6. Studio production
7. Editing
8. Individual project
9. Industry analysis and jobs
10. Media ethics and standards in video

Contrast the differences between the various film and video production formats.

Reconstruct a script using basic script requirements.

Explain the principles of the video camera and its professional use.

Assess appropriate lighting scenarios for specific shoots.

Discuss the essential elements of the various jobs on the production team, for both location and studio assignments.

Organize and execute at least one short video production.

Explain and demonstrate the basic principles of creative editing.

Analyze the industry through current trends and assess the various jobs in the field.

Critique the role of mass media as it relates to film and video standards, current trends and ethical/moral issues.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement

- Tests on the pertinent theoretical and critical knowledge
- Graded individual projects, group work, and group presentation analysis
- Review of portfolio of video work produced

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for TCM 257

TCM258 - Film/Video Production II

Overview

Subject
Media Communication Arts

Academic Department
Media Communication Arts

School
Liberal Arts

Course Description
TCM (Telecommunication) is now MCA (Media Communication Arts). Please search for MCA-258 to register for this course. Offers further knowledge and development of skills required for film, video, and multimedia production, with the emphasis on advanced concepts in lighting and editing as part of program production in specialized formats for news, entertainment, and education.

Course Pre-requisite(s)
TCM157 Digital Video Editing, TCM251 Audio Production, and TCM257 Video Production I

Course Co-requisite(s)
TCM251 Audio Production

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
62

Total Student Contact Hours:
62

Course Fee
50

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
Other

Goals, Topics, and Objectives

Core Course Topics

1. Instructional, educational and informational videos: purpose and standard production guidelines
2. Documentaries: purpose and standard production guidelines
3. Dramatic Scenes: the Continuity Technique
4. Lighting choices and techniques
5. Editing and Special Effects techniques
6. Post Production Planning
7. Distribution Choices
8. Group work: the team approach to video production
9. Industry standards and analysis for ethical and professional considerations

Plan and produce a short instructional/educational/informational video, a short documentary or dramatic scene on video, with emphasis on continuity.

Execute intermediate lighting skills.

Execute intermediate editing and special effects skills.

Generate post-production plan of work to achieve desired end results.

Compare and contrast distribution options for video.

Debate choices for content/editing as a group to support a final product as it relates to responsible media production.

Evaluate industry standards while assessing ethical implications of media production choices/techniques

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement

- Tests on the pertinent theoretical and critical knowledge
- Review of portfolio of video work produced

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for TCM 258

TCM261 - Broadcast Journalism

Overview

Subject
Media Communication Arts

Academic Department
Media Communication Arts

School
Liberal Arts

Course Description
TCM (Telecommunication) is now MCA (Media Communication Arts). Please search for MCA-261 to register for this course. A real life experience, guided by a Telecommunication instructor, in broadcast news writing for the mediums of radio and television. Working as a reporter on the news staff of WHFR-FM 89.3, the student-staffed station of Henry Ford College, the student is expected to weekly contribute quality broadcast news stories: written copy, copy with actualities, and prerecorded interviews.

Course Pre-requisite(s)
Eligible to take ENG courses at HFC.

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
15

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
Skilled Demonstration Details

Skilled demonstration, given in department by department faculty. Faculty will assess demonstration based on evaluation rubric. Evaluation rubric and student checklist located in The School of Liberal Arts office.

Portfolio Review Details

Portfolio must contain evidence that illustrates competency in all course learning objectives not already measured through the skilled demonstration. Department faculty will evaluate submitted portfolios based on the evaluation rubric. Evaluation rubric and student checklist located in The School of Liberal Arts office.

Goals, Topics, and Objectives

Core Course Topics

1. What is "News"?
2. Print and online sources and areas of research for broadcast news
3. Mechanics of Radio and Television News Writing
4. Radio news story and show production for WHFR Radio
5. Newsroom tasks and the role of the News Director
6. Media Laws and Ethics for newswriting
7. Actualities: recording, editing and proper layout
8. Interviewing
9. Television news packages
10. News through social media

Analyze and debate the topic of what constitutes "news" in a media literate society.

Develop and integrate the research and rewrite of print and other sources required for broadcast news stories.

Interpret and evaluate the standard mechanical form and style of broadcast new stories.

Write, revise and produce by deadline standard broadcast news stories per weekly class news show to fit the mission of WHFR's format.

Explain and demonstrate the job of News Director for at least one class news broadcast.

Evaluate a minimum of 5 class news broadcasts for legal and ethical consequences and industry standards.

Record and edit actualities, incorporated into news stories, submitted by deadline, over the class broadcast period.

Conduct, record, and edit if necessary one 3-5 minute radio interview for potential airing on WHFR.

Create a television news package script to reflect at minimum industry standards.

Discuss and debate ongoing how social media is affecting the knowledge base of our news interpretation as a society.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement

- Tests on the pertinent theoretical and critical knowledge.
- Critique and grading of "newsworthiness and airability" of story choices and mechanics each week.
- Review of portfolio of final draft of all scripts produced, including sound bites and TV package if applicable.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for TCM 261

TCM281 - Capstone

Overview

Subject
Media Communication Arts

Academic Department
Media Communication Arts

School
Liberal Arts

Course Description
TCM (Telecommunication) is now MCA (Media Communication Arts). Please search for MCA-281 to register for this course. Provides required assessment of knowledge and skill for students in their last semester of course work before completing their Associate of Arts degree in Telecommunication. Should be taken during the student's last term of required TCM classes.

Course Pre-requisite(s)
None. Should be taken during the student's last term of required TCM classes. Instructor Permission Only

Course Co-requisite(s)
None. Should be taken during the student's last term of required TCM classes. Instructor Permission Only

Credit Hours
1

Total Contact Hours

Total Instructor Contact Hours:
16

Total Student Contact Hours:
16

Course Fee
10

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Assessment testing of Telecommunication basics, Film History and Criticism, Media Writing, Media Performance, Audio Production, Video Production, and Broadcast Journalism
2. Collection of portfolio of work:
3. Assessment of critical essay
4. Prioritizing of significance of Telecommunication theories and approaches in the 21st century

Prove knowledge of core TCM subject matter through successful testing.

Finalize a portfolio review of work in TCM 131, 132, 241, 243, 251, 258, and 261.

Develop a subjective priority list and essay of theoretical knowledge learned.

Produce and defend an essay of critical analysis on a specific topic agreed upon by student and instructor.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement

- Compare scores on tests those of previous graduates
- Review of portfolio for quality and specific industry standards
- Evaluate critical essay's expression and depth of insight

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for TCM 281

TCM294 - Telecommunication Internship

Overview

Subject
Media Communication Arts

Academic Department
Media Communication Arts

School
Liberal Arts

Course Description
TCM (Telecommunication) is now MCA (Media Communication Arts). Please search for MCA-294 to register for this course. Offers on-the-job experience with a telecommunication business, such as a radio or TV station, a cable TV studio, or advertising or public relations office. Minimum requirement of 150 hours of work (volunteer or paid as established by selected company). Positions vary from semester to semester. Student should contact the instructor for counseling and permission at least one month before the semester begins.

Course Pre-requisite(s)
To be taken towards end of student's TCM degree completion. Pre-approval from Instructor is required before enrolling.

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Academic Level
Undergraduate

Goals, Topics, and Objectives

Course Goals
To obtain on-the-job experience with a telecommunication business or organization for the purpose of exploring how a real-world facility functions, day to day operations, rules and regulations, and examining and contributing to key tasks associated within the business or organization.

Core Course Topics

1. The workings of a real-world telecommunication facility to showcase basic telecommunication knowledge learned and gain advanced knowledge of that specific field.
2. Project log and maintaince system for completed skills used in resume or portfolio support.
3. Successful integration into a working media environment.
4. Industry and specific facility evaluation as it relates to coursework, future career trends, and networking opportunities.
5. The impact of specific media outlet, its role in society and ethical standards.

Evaluate and apply completed coursework learned in a real-world telecommunication environment.
Illustrate and defend when asked about project log and maintenance system for personal resume or portfolio.
Successfully integrate in student's chosen field with working professionals and contribute to the success of the specific facility in an ongoing way.
Synthesize behind-the-scenes knowledge of the inside workings of a specific media outlet and ongoing examples of what it takes to be successful.
Create a first impression as a contributor to the specific media outlet for possible future employment or resume reference.
Generate valuable networking contacts through association as a contributor to the specific media outlet for possible future employment or resume reference.
Outline and define the overall impact of the media outlet, its critical role in society locally, globally and ethically, and how the student's input made a difference through an agreed-upon written log, project or critical essay at the semester's end.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement

- Evaluation log to be completed and graded at semester's end of student's contribution to specific media outlet.
- Final evaluation by media supervisor of facility student was placed in.
- Final graded student presentation, written and/or verbal, expressing evaluation of student's analysis of media entity and its impact on our local society.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for TCM 294

TCM295 - Directed Study

Overview

Subject
Media Communication Arts

Academic Department
Media Communication Arts

School
Liberal Arts

Course Description
TCM (Telecommunication) is now MCA (Media Communication Arts). Please search for MCA-295 to register for this course. Instructor-guided work on a student-initiated project in the Telecommunication field. Project must be approved by instructor and can be either scholarly or creative in nature, or both.

Course Pre-requisite(s)
Instructor Permission Only

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
10

Academic Level
Undergraduate

Goals, Topics, and Objectives

Course Goals
To explore a topic in the Telecommunication field in a scholarly and/or creative way so as to gain a deeper understanding or appreciation for the topic.

Core Course Topics

1. Discussion and submission of a specific project proposal which, after acceptance by instructor, becomes the class project.
2. The use of critical thinking to relate aspects of this project to support and enhance the importance of a media-literate society.
3. Project work and completion, with guidance from the instructor at critical stages.
4. Creation of a measurement plan which, after acceptance by instructor, becomes the class contract.

Propose a project based on some aspect of Telecommunication with instructor approval.
Organize a measurement plan to allow for assessment with instructor approval.
Successfully structure and produce a significant project in a Telecommunication area, either scholarly, creative or both.
Present and defend overall decision for importance of topic choice and final project as it relates to supporting a media literate society.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Instructor will judge the quantity and quality of the work. A general guideline for satisfactory scholarly work: a 20+ page critical research paper; for creative work: a project evidencing 120-150 hours of effort.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for TCM 295

TECH101 - Introduction to Industrial Technology

Overview

Subject
Industrial Technology

Academic Department
Adv Manufacturing/Fabrication

School
Business, Entrepreneurshp, PD

Course Description
Introduces students to the fundamentals of being a successful college student on the path to a profession in industrial technology. Subjects are divided into three categories: Student Self Awareness, Manufacturing Work and Culture, and Test Taking (technical), and include topics such as self-directed learning, critical thinking and problem solving, industrial safety policies and procedures, job outlook, and elements of standardized testing including graphic arithmetic, assemblies, mechanical comprehension, and troubleshooting. The class includes guest speakers from manufacturing and the service industry. The course utilizes digital learning materials, hands-on labs, and a student self assessment of their learning and study skills.

Credit Hours
2

Total Contact Hours

Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Skilled Demonstration, Portfolio Review, Interview

Credit for Prior College Level Learning (CPCLL) Details
Skilled Demonstration Details

Students will demonstrate successful use of all class related hands-on tools selected at the discretion of faculty. The class hand tool evaluation rubric will be used. Students must complete one or more of the Standardized Pre-employment course tests successfully as selected by faculty.

Portfolio Review Details

Students must provide writing samples related to the topic of the, "Self-directed student".

Interview Details

Students will be interviewed by faculty to determine their level of understanding of: advanced technological occupations, careers, success factors and self-directed learning strategies (if not assigned in a writing assignment).

Goals, Topics, and Objectives

Course Goals
To provide experiences that will allow students to better understand the opportunities and skills essential for successful careers in advance technology occupations.

Core Course Topics

1. Occupation and Career Research in trades and technology
2. Working individually and as part of a team in a diverse industrial environment.
3. Critical thinking and problem solving in the industrial workplace.
4. Preparation for Industry Technical Standardized Testing
5. Hand Tool Use in Manufacturing
6. Industrial Safety

Identify and implement the techniques used to prepare for working individually and as a team member in an industrial environment.

Research and analyze manufacturing work, culture, and industrial occupational topics.

Compose journals, logs, and other forms of reflective writing used in an industrial environment.

Define OSHA rules and regulations. Identify the types of technical standardized testing graduates in industry may be required to complete for employment.

Define the process to prepare for Industry Certification Exams.

Identify and define the common hand tools found in the manufacturing environment.

Demonstrate safe use of hand tools.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
The following will be used to assess student's academic achievement:

- Quizzes
- Labs
- Written Reports
- Presentations
- Tests

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for TECH 101

THEA131 - Theatre Appreciation

Overview

Subject
Theater

Academic Department
Fine & Performing Arts

School
Liberal Arts

Course Description
Explores the components, methods, and history of theatrical production. Subject areas may include but are not limited to acting, directing, and technical theatre.

Course Pre-requisite(s)
Eligible to take ENG courses at HFC

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
10

Academic Level
Undergraduate

General Education Category
Humanities and Fine Arts

Michigan Transfer Agreement (MTA) Category
Category 5: Humanities and Fine Arts - Applied Degrees, Category 5: Humanities and Fine Arts - Transfer Degrees

Goals, Topics, and Objectives

Course Goals
This course is designed to foster an awareness of the theatrical components extant in major world cultures.

Core Course Topics

1. Origins and Development of Theatre

   Compare and contrast the major structural and developmental components involved in the origins and development of theatre, including Western and non-Western examples.

2. Play Structure.

   Identify the major structural components of a play.

3. Play Production.

   Identify the difference between "play" as script and "play" as production.
   Describe the basic requirements for acting and directing, and their basic relationship to each other.
   Write critical reviews of theatrical productions.
   Write analytical papers about theatrical subjects.

4. Play Design.

   Describe the capabilities of scene design, lighting, acting, directing, and costuming.

Compare and contrast the major structural and developmental components involved in the origins and development of theatre, including Western and non-Western examples.

Identify the major structural components of a play.

Identify the difference between "play" as script and "play" as production.

Describe the basic requirements for acting and directing, and their basic relationship to each other.

Write critical reviews of theatrical productions.

Write analytical papers about theatrical subjects.

Describe the capabilities of scene design, lighting, acting, directing, and costuming.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement

1. Objective tests.
2. A midterm.
3. A final.
4. An analytical and/or research paper or project.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for THEA 131

THEA132 - Acting I

Overview

Subject
Theater

Academic Department
Fine & Performing Arts

School
Liberal Arts

Course Description
Introduces basic acting techniques, theories of acting, and rehearsal procedures. Emphasizes modern and contemporary comedies, and dramas. Students perform scenes from contemporary plays.

Course Pre-requisite(s)
Eligible to take ENG courses at HFC.

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
15

Academic Level
Undergraduate

Goals, Topics, and Objectives

Course Goals
This course is designed to foster an awareness of the theatrical performance components extant in Western Culture.

Core Course Topics

1. Memorization Techniques

   Demonstrate ease of memorization techniques during various scenes.
2. Scene Analysis Techniques

   Analyze a scene according to contemporary acting theories. Critique and analyze the performances of others.
3. Stage Areas and Movement

   Move on the stage in a focused, theatrically appropriate manner.
4. Vocal Techniques

   Employ vocal techniques in order to speak on the stage with appropriate clarity.
5. Relaxation Techniques

   Demonstrate how to relax using appropriate techniques.
6. Concentration Techniques

   Demonstrate proper concentration techniques.
7. Warm-Up Techniques

   Demonstrate proper warm-up techniques.

Demonstrate ease of memorization techniques during various scenes.

Analyze a scene according to contemporary acting theories.

Critique and analyze the performances of others.

Move on the stage in a focused, theatrically appropriate manner.

Employ vocal techniques in order to speak on the stage with appropriate clarity.

Demonstrate how to relax using appropriate techniques.

Demonstrate proper concentration techniques.

Demonstrate proper warm-up techniques.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement

1. Written Scene Analysis Essays
2. 3-4 Memorized and rehearsed scenes and/or monologues presented in class
3. Demonstrated understanding of blocking and stage terminology as needed for an actor
4. Demonstrated ability to "slate" and adhere to industry audition standards

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for THEA 132

THEA135 - Introduction to Stage Makeup

Overview

Subject
Theater

Academic Department
Fine & Performing Arts

School
Liberal Arts

Course Description
Provides an analysis of the basic functions of stage makeup and demonstrates the art of makeup application and design, including such potential topics as age, animal, corrective, contouring, fantasy/horror, cosplay, high fashion, and foam latex prosthetic makeup techniques. Students design and apply their own makeup as well as design and apply makeup for classmates and/or actors in HFC mainstage productions.

Course Pre-requisite(s)
ENG-093 and/or ENG-081 eligible

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
30

Academic Level
Undergraduate

General Education Category
Humanities and Fine Arts

Michigan Transfer Agreement (MTA) Category
Category 5: Humanities and Fine Arts - Applied Degrees, Category 5: Humanities and Fine Arts - Transfer Degrees

Goals, Topics, and Objectives

Course Goals
Students will learn the basic techniques of corrective makeup, highlight and shadow techniques, two-dimensional aging, eyebags, nasolabial folds, 3-D effects, stippling, wounds, stylized makeup, and introductory additive techniques (ex., crepe hair, appliance/prosthetics, etc.).

Core Course Topics

1. Straight Makeup

   Apply straight stage makeup.
2. Character Makeup

   Apply character stage makeup.
3. Apply "additive" makeup

   Potential techniques include:

   1. crepe beards/hair
   2. appliances, including wounds, horns, ears, foreign objects, etc
   3. facial prosthetics, including noses, brows, chins, etc.

Apply straight stage makeup.

Apply character stage makeup.

Apply "additive" makeup. Potential techniques include crepe beards/hair appliances, including wounds, horns, ears, foreign objects, etc. facial prosthetics, including noses, brows, chins, etc.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement

1. Objective tests.
2. Projects.
3. Analysis/reports of professional makeup.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for THEA 135

THEA138 - Stage Costuming

Overview

Subject
Theater

Academic Department
Fine & Performing Arts

School
Liberal Arts

Course Description
Introduces contemporary aesthetic and creative design principles for theatrical costuming, with an emphasis on line, form, meeting production requirements, budgeting, and thematic unity.

Course Pre-requisite(s)
Eligible to take ENG courses at HFC

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
30

Academic Level
Undergraduate

General Education Category
Humanities and Fine Arts

Michigan Transfer Agreement (MTA) Category
Category 5: Humanities and Fine Arts - Applied Degrees, Category 5: Humanities and Fine Arts - Transfer Degrees

Goals, Topics, and Objectives

Core Course Topics

1. Script Analysis for Costume Design

   Analyze scripts to determine aesthetic, historical, and practical design needs.

2. Research and Interpret Historical and Contemporary styles of clothing

   Identify historical changes in the use and prevalence of colors, silhouettes, textures, and accouterments based on changes in fashion, social priorities, and practical usage.

   Identify the impact of financial status, social class, labor requirements, and individual personality on a character's costume.

3. Costume Renderings and Costume Plots

   Develop a costume rendering following industry standards to effectively communicate design intentions using traditional, collage, multi-media, and/or digital methods.

   Develop a multi-character costume plot following industry standards to effectively communicate design intentions using traditional, collage, multi-media, and/or digital methods.

Analyze scripts to determine aesthetic, historical, and practical design needs.

Research and Interpret Historical and Contemporary styles of clothing
Identify historical changes in the use and prevalence of colors, silhouettes, textures, and accouterments based on changes in fashion, social priorities, and practical usage.

Identify the impact of financial status, social class, labor requirements, and individual personality on a character's costume.

Develop a costume rendering following industry standards to effectively communicate design intentions using traditional, collage, multi-media, and/or digital methods.

Develop a multi-character costume plot following industry standards to effectively communicate design intentions using traditional, collage, multi-media, and/or digital methods.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement

1. Midterm exam or project
2. Final exam or project
3. A written costume analysis of a play
4. Detailed costume renderings for at least two characters
5. An ensemble costume plot

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for THEA 138

THEA149 - Children's Theatre Production

Overview

Subject
Theater

Academic Department
Fine & Performing Arts

School
Liberal Arts

Course Description
Offers lecture and practice in the organization of specific skills necessary for the public performance of children's plays such as acting, assistant directing, stage management, publicity, and house management. Requires students to participate in HFC's annual Children's Theatre presentation.

Course Pre-requisite(s)
Eligible to take ENG courses at HFC. Successful completion of Acting I or Instructor Permission.

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
30

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Auditions

   Apply research practices to auditions appropriate for children's play production.

2. Production Meetings

   Participate in pre-production and production meetings, or a production geared for elementary, junior high, and family audiences.

3. Casting

   Participate in casting for a production geared for elementary, junior high, and family audiences.

4. Schedules

   Incorporate scheduling for a production geared for elementary, junior high, and family audiences.

5. Director's Concept

   Develop a concept for a production geared for elementary, junior high, and family audiences.

6. Acting

   Demonstrate acting techniques appropriate for children's play production.

7. Detailing Technical Elements

   Apply advanced technical theatre skills appropriate for a one-act play production.

Apply research practices to auditions appropriate for children's play production.

Participate in pre-production and production meetings, or a production geared for elementary, junior high, and family audiences.

Participate in casting for a production geared for elementary, junior high, and family audiences.

Incorporate scheduling for a production geared for elementary, junior high, and family audiences.

Develop a concept for a production geared for elementary, junior high, and family audiences.

Demonstrate acting techniques appropriate for children's play production.

Apply advanced technical theatre skills appropriate for a one-act play production.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
A rubric that evaluates a student's:

1. ability to meet deadlines.
2. ability to work well with others.
3. effectiveness of communication with instructors and fellow students.
4. ability to work independently as well as in small groups.
5. knowledge and understanding of playscript in relationship to director's and designer's concepts.
6. knowledge and understanding of playscript in relationship to rehearsal/technical rehearsal/performance process.
7. quality of procedural process participation: meetings, notes, work calls, lectures, technical rehearsals, performances, and strike.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for THEA 149

THEA150 - Stagecraft

Overview

Subject
Theater

Academic Department
Fine & Performing Arts

School
Liberal Arts

Course Description
Offers a basic survey of the major techniques and theories of scenography used in the modern theatre.

Course Pre-requisite(s)
Eligible to take ENG courses at HFC.

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
20

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
Determined by department.

Goals, Topics, and Objectives

Core Course Topics

1. Design concepts.

   Describe designs concepts.
2. Determining design elements.

   Analyze a script for its scenographic needs.
3. Design styles.

   Demonstrate major design styles.
4. Tools and materials.

   Define basic terminology, equipment, and supplies.
5. Sketching, working drawings, design, and drafting.

   Apply design elements in the creation of design projects.
   Examine concepts and applications of design.
   Design a scale floorplan.

Describe designs concepts.

Analyze a script for its scenographic needs.

Demonstrate major design styles.

Define basic terminology, equipment, and supplies.

Apply design elements in the creation of design projects.

Design a scale floorplan.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement

1. Quizzes
2. Midterm
3. Final exam
4. Projects

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for THEA 150

THEA232 - Acting II

Overview

Subject
Theater

Academic Department
Fine & Performing Arts

School
Liberal Arts

Course Description
Explores various acting styles that may include Greek, Medieval, Renaissance, French Classical, American Melodrama, Farce, Musical Theater, Artaudian Theatre, and other appropriate styles.

Course Pre-requisite(s)
Eligible to take ENG courses at HFC. Successful completion of Acting I or Instructor Permission.

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
15

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Historical periods

   Identify the styles of characterization commonly associated with the various time periods and types of theatres under consideration.
2. Stylistic theatrical production and design

   Identify stylistic influences in a contemporary play to be chosen by the instructor. Identify the major ideological stylistic influences for Western theatre.
3. Stylistic acting

   Identify the styles of stage speech commonly associated with the various time periods and types of theatres under consideration.
   Analyze the styles of movement commonly associated with the various time periods and types of theatres under consideration.
   Apply various advanced physicalization techniques to character creation.
   Organize and prepare a theatrical scene representative of the theatrical styles under consideration.
   Write character analyses using techniques other than those of Stanislavski.
   Apply various concentration and relaxation exercise to acting styles under consideration.
4. Advanced Coursework in Contemporary Drama

   Build on skills from Acting I to develop a monologue performance according to contemporary industry audition standards

   Build on skills from Acting I to further develop a "slate" and appropriate, industry-standard audition behavior
5. Audition Materials

   Develop a one-page acting resume based on contemporary industry standards.

   Develop and/or Describe contemporary industry expectations for Actor Headshots and Reels.

Identify the styles of characterization commonly associated with the various time periods and types of theatres under consideration.

Identify stylistic influences in a contemporary play to be chosen by the instructor.

Identify the major ideological stylistic influences for Western theatre.

Identify the styles of stage speech commonly associated with the various time periods and types of theatres under consideration.

Analyze the styles of movement commonly associated with the various time periods and types of theatres under consideration.

Apply various advanced physicalization techniques to character creation.

Organize and prepare a theatrical scene representative of the theatrical styles under consideration.

Write character analyses using techniques other than those of Stanislavski.

Apply various concentration and relaxation exercise to acting styles under consideration.

Build on skills from Acting I to develop a monologue performance according to contemporary industry audition standards.

Build on skills from Acting I to further develop a "slate" and appropriate, industry-standard audition behavior.

Develop a one-page acting resume based on contemporary industry standards.

Develop and/or describe contemporary industry expectations for Actor Headshots and Reels.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement

1. Script analysis written essays
2. Demonstration of historical "period" acting styles
3. 2-4 memorized, rehearsed, and performed monologues and scenes from both contemporary and classical periods
4. Demonstration of appropriate industry standards for auditioning
5. Development of industry-standard acting resume

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for THEA 232

THEA235 - Topics in Theatre

Overview

Subject
Theater

Academic Department
Fine & Performing Arts

School
Liberal Arts

Course Description
Provides special study in the area of theatre, organized by style, production approach, historical period, or other criteria. Specific topics and any prerequisites are listed in the current semester's class schedule or may be obtained through the departmental office.

Course Pre-requisite(s)
Eligible to take ENG courses at HFC.

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. To be developed by the instructor for each individual offering

To be developed by the instructor for each individual offering.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
To be developed by the instructor for each individual offering.

General Course Requirements and Recommendations
A detailed course syllabus will be approved by the School ILT prior to the course being offered. A copy of the course syllabus will be emailed to AALC and Curriculum Committee "for information only" for the first meeting after the beginning of the term in which the course is offered to facilitate any coordination needed with Academic Affairs and Registration and Records.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for THEA 235

THEA238 - Theatre History

Overview

Subject
Theater

Academic Department
Fine & Performing Arts

School
Liberal Arts

Course Description
Offers a survey of theatrical production, including acting, directing, theatre architecture, artistic movements, and significant ideas that affect the development of theatre from the Greeks through the present. Emphasizes individual research and projects.

Course Pre-requisite(s)
Eligible to take ENG courses at HFC.

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
10

Academic Level
Undergraduate

General Education Category
Humanities and Fine Arts

Michigan Transfer Agreement (MTA) Category
Category 5: Humanities and Fine Arts

Goals, Topics, and Objectives

Core Course Topics

1. Style and Culture

   Identify the cultural differences that create unique theatrical styles.
2. History and Production

   Analyze the association between the history of an era and its theatrical productions.
3. Western Theatre Influences

   Identify the major ideological influences for Western Theater.
4. Stage Spaces

   Identify the importance of physical space upon historical plays.
5. Technical Theatre and Historical Productions

   Describe the basic concepts of lighting, acting, directing, and costuming for historical productions.
6. Writing about Historical Theatre

   Write a research paper about historical theatrical subjects.

Identify the cultural differences that create unique theatrical styles.

Analyze the association between the history of an era and its theatrical productions.

Identify the major ideological influences for Western Theater.

Identify the importance of physical space upon historical plays.

Describe the basic concepts of lighting, acting, directing, and costuming for historical productions.

Write a research paper about historical theatrical subjects.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement

1. A midterm exam
2. A final exam
3. Forum discussion posts
4. A research paper

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for THEA 238

THEA255 - Lighting

Overview

Subject
Theater

Academic Department
Fine & Performing Arts

School
Liberal Arts

Course Description
Examines the processes, techniques, and principles involved in lighting the stage, studio, and location. Discusses the properties and uses of light, color media, and stage lighting equipment. Also offers the opportunity to participate in the stage lighting of an HFC theatre production.

Course Pre-requisite(s)
Eligible to take ENG courses at HFC.

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
10

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Physics of Light.

   Describe the physical properties of light.
2. Physics of Color.

   Describe the physical properties of color and color combination for light.
3. Mechanics of Lighting Instruments.

   Identify the types and parts of major lighting instruments.
4. Using Accessories, Equipment, Materials, and Supplies.

   Demonstrate the application of accessories, equipment, materials, and supplies.
5. Lighting Plots.

   Construct a light plot. Read a light plot.
6. Gels, Hanging, and Focusing.

   Hang, focus, and gel from a light plot.
7. Lighting Board

   Program a computerized board in basic cues.

Describe the physical properties of light.

Describe the physical properties of color and color combination for light.

Identify the types and parts of major lighting instruments.

Demonstrate the application of accessories, equipment, materials, and supplies.

Construct a light plot.

Read a light plot.

Hang, focus, and gel from a light plot.

Program a computerized board in basic cues.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement

1. A midterm exam
2. A final exam
3. A play review
4. A research paper

Texts
Required course materials are located in the department.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for THEA 255

THEA256 - Directing

Overview

Subject
Theater

Academic Department
Fine & Performing Arts

School
Liberal Arts

Course Description
Presents the principles of stage direction, how to survey the areas of composition, picturization, movement, rhythm, auditions, casting, rehearsals, and actor psychology.

Course Pre-requisite(s)
Eligible to take ENG courses at HFCSuccessful completion of THEA131 Theatre Appreciation Theatre Appreciation or Instructor Permission

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
20

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Script Analysis

   Analyze scripts for directing requirements.
2. Production Design

   Analyze how to conceptualize the world of the play in physical terms (Set-Lights-Costumes-Makeup).
   Draw a floor plan that reflects the directorial concept.
3. Lighting

   Organize lighting cues.
4. Rehearsal Schedules

   Construct a rehearsal schedule based on the temporal needs of the script.
5. Directing

   Direct a scene in a one-act play utilizing appropriate picturization, movement, and rhythm.
   Manage the practicalities of theatrical production in the direction of a scene from a one-act play.
6. Sound

   Organize sound cues.

Analyze scripts for directing requirements.

Analyze how to conceptualize the world of the play in physical terms (Set-Lights-Costumes-Makeup).

Draw a floor plan that reflects the directorial concept.

Organize lighting cues.

Construct a rehearsal schedule based on the temporal needs of the script.

Direct a scene in a one-act play utilizing appropriate picturization, movement, and rhythm.

Manage the practicalities of theatrical production in the direction of a scene from a one-act play.

Organize sound cues.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement

1. Exams
2. A Prompt Book
3. A 15-minute scene from a one-act play presented in class

Texts
Determined by department.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for THEA 256

THEA260 - Acting III

Overview

Subject
Theater

Academic Department
Fine & Performing Arts

School
Liberal Arts

Course Description
An audition monologue preparation course that focuses on contemporary realism, and also includes classical work. Students create preparation processes, resumes, and practice audition interviews. Advanced acting technique exercises are practiced to develop convincing character and staging.

Course Pre-requisite(s)
THEA232 Acting II Acting II or Instructor Permission. Eligible to take ENG courses at HFC.

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
30

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Audition styles

   Identify the various types and styles of theatrical auditions.

2. Audition strategies

   Write a strategy list for various auditions.

3. Local theatre conditions and strategies

   Identify appropriate behavior at auditions.

4. Auditioning at local theatres

   Describe the audition conditions and requirements of at least four (4) area theatres.
   Audition at six (6) local theatres.
   Report on audition experiences to classmates and instructor.

Identify the various types and styles of theatrical auditions.

Write a strategy list for various auditions.

Identify appropriate behavior at auditions.

Describe the audition conditions and requirements of at least four (4) area theatres.

Report on audition experiences to classmates and instructor.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement

1. Exams
2. A research paper
3. Six (6) auditions at local theaters

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for THEA 260

THEA281 - Theatre Capstone

Overview

Subject
Theater

Academic Department
Fine & Performing Arts

School
Liberal Arts

Course Description
Provides the required assessment of knowledge and skills for students in their last semester of course work for the Theatre Pathway of the Associates of Arts Degree in Liberal Arts.

Course Pre-requisite(s)
Successful completion of THEA1902 Theatre Experience II or Instructor Permission

Credit Hours
1

Total Contact Hours

Total Instructor Contact Hours:
16

Total Student Contact Hours:
16

Course Fee
10

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
Determined by department.

Goals, Topics, and Objectives

Core Course Topics

1. Resume

   Produce a professional resume according to current industry standards and student subfield (theatrical performance, dramaturgy, design, and/or technology)

2. Portfolio and/or monologue development

   Actors: develop audition material (monologues) for multiple audition scenarios, including film, contemporary theatre, and classical theatre

   Other fields: develop a digital portfolio of work according to current industry standards

Produce a professional resume.

Evaluate monologues for audition purposes if appropriate.

Critique one's own work.

Design a portfolio of program work if appropriate.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Audition or Portfolio Presentation

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for THEA 281

THEA1901 - Theatre Experience I

Overview

Subject
Theater

Academic Department
Fine & Performing Arts

School
Liberal Arts

Course Description
Provides students with the opportunity to earn credit while actively participating in multiple areas of theatre production. This is the first of three experience-based one-credit courses where students work onstage, backstage, or in front-of-house operations for theatre productions during the semester. The course includes instructor presentation of specific elements of application though lecture, lecture/demonstration and/or laboratory experience.

The production work for Theatre Experience I is suitable for a student's initial exposure to theatre production work. Theatre Experience II, III, IV, V and VI builds on the production work completed in Theatre Experience I. These courses will enable students to be engaged in up to six (6) public performances.

Credit Hours
1

Total Contact Hours
Total Instructor Contact Hours:
15

Total Student Contact Hours:
15

Academic Level
Undergraduate

Goals, Topics, and Objectives

Course Goals

1. To provide a skills-based immersion in the process of theatrical production.
2. To provide students with an opportunity to focus on a particular aspect of the theatrical production process. Application of Core Course Topics and Objectives is dependent on the student's specialization for the semester.

Core Course Topics

1. Auditions
   - Demonstrate audition technique appropriate for the play being produced.
2. Production Meetings
   - Apply cooperative behavior techniques to group meetings.
3. Casting
   - Employ casting policies and procedures appropriate for the play being produced.
4. Schedules
   - Analyze production schedules of various departments for optimum synergy.
5. Director's Concept
   - Interpret the director's concept for the appropriate production area.
6. Character Analysis
   - Apply appropriate tools to character analysis for the style at hand.
7. Blocking
   - Create appropriate movement patterns for the character portrayed.
8. Prompt Book
   - Formulate a prompt book that reflects the practical needs of the play under production.
9. Make Up
   - Design make up appropriate for the character portrayed.
10. Scenic Concepts
    - Transform scenic concepts into practical stage utilities.
11. Technical Elements
    - Adapt technical elements to the requirements of the production.
12. Dress Rehearsals
    - Execute dress rehearsals with full production elements.
13. Strike
    - Design an effective strike strategy for the semester's production.

Demonstrate audition technique appropriate for the play being produced.

Apply cooperative behavior techniques to group meetings.

Analyze production schedules of various departments for optimum synergy.

Interpret the director's concept for the appropriate production area.

Apply appropriate tools to character analysis for the style at hand.

Create appropriate movement patterns for the character portrayed.

Formulate a prompt book that reflects the practical needs of the play under production.

Design make up appropriate for the character portrayed.

Transform scenic concepts into practical stage utilities.

Adapt technical elements to the requirements of the production.

Execute dress rehearsals with full production elements.

Design an effective strike strategy for the semester's production.

Evaluate dramatic literature for full-length play production.

Apply research practices to auditions, casting, rehearsals, and performances appropriate for full-length play production.

Demonstrate advanced acting techniques appropriate for full-length play production.

Employ advanced management skills appropriate for full-length play production.

Apply advanced technical theatre skills appropriate for full-length play production.

Practice advanced run crew skills appropriate for full-length play production.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of academic achievement may include, but not be limited to, individual projects, vocabulary, theatre participation and tests. Learning activities are assessed using a rubric focusing on:

1. Meeting deadlines.
2. Working well with others.
3. Communicating with instructors and fellow students.
4. Working independently as well as in small groups.
5. Interpretation, knowledge, and demonstration of understanding of playscript in relationship to director's and designer's concepts.
6. Interpretation, knowledge, and demonstration of understanding of playscript in relationship to rehearsal/technical rehearsal/performance process.
7. Active participation in procedures and processes related to meetings, work calls, lectures, technical rehearsals, performances, and strike.

Texts
Course materials and textbooks will be communicated by class instructor and varies depending on the semester's production.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for THEA 1901

THEA1902 - Theatre Experience II

Overview

Subject
Theater

Academic Department
Fine & Performing Arts

School
Liberal Arts

Course Description
This is the second of three experience-based one-credit courses where students work onstage, backstage, or in front-of-house operations for theatre productions during the semester. The course includes instructor presentation of specific elements of application though lecture, lecture/ demonstration and/or laboratory experience.The production work for Theatre Experience II builds on the production work completed in Theatre Experience I. In this course, the student will practice and refine techniques learned in the previous Theatre Experience course in addition to learning new parts, backstage practices, etc.

Course Pre-requisite(s)
THEA1902 Theatre Experience II or instructor permission

Credit Hours
1

Total Contact Hours
Total Instructor Contact Hours:
15

Total Student Contact Hours:
15

Academic Level
Undergraduate

Goals, Topics, and Objectives

Course Goals

1. To provide a skills-based immersion in the process of theatrical production.
2. To provide students with an opportunity to focus on a particular aspect of the theatrical production process. Application of Core Course Topics and Objectives is dependent on the student's specialization for the semester.

Core Course Topics

1. Auditions
   - Demonstrate audition technique appropriate for the play being produced.
2. Production Meetings
   - Apply cooperative behavior techniques to group meetings.
3. Casting
   - Employ casting policies and procedures appropriate for the play being produced.
4. Schedules
   - Analyze production schedules of various departments for optimum synergy.
5. Director's Concept
   - Interpret the director's concept for the appropriate production area.
6. Character Analysis
   - Apply appropriate tools to character analysis for the style at hand.
7. Blocking
   - Create appropriate movement patterns for the character portrayed.
8. Make Up
   - Design make up appropriate for the character portrayed.
9. Scenic Concepts
   - Transform scenic concepts into practical stage utilities.
10. Technical Elements
    - Adapt technical elements to the requirements of the production.
11. Strike
    - Design an effective strike strategy for the semester's production.
12. Prompt Book
    - Formulate a prompt book that reflects the practical needs of the play under production.
13. Dress Rehearsals
    - Execute dress rehearsals with full production elements.

Demonstrate audition technique appropriate for the play being produced.

Apply cooperative behavior techniques to group meetings.

Employ casting policies and procedures appropriate for the play being produced.

Analyze production schedules of various departments for optimum synergy.

Interpret the director's concept for the appropriate production area.

Apply appropriate tools to character analysis for the style at hand.

Create appropriate movement patterns for the character portrayed.

Design make up appropriate for the character portrayed.

Transform scenic concepts into practical stage utilities.

Adapt technical elements to the requirements of the production.

Design an effective strike strategy for the semester's production.

Formulate a prompt book that reflects the practical needs of the play under production.

Execute dress rehearsals with full production elements.

Evaluate dramatic literature for full-length play production.

Apply research practices to auditions, casting, rehearsals, and performances appropriate for full-length play production.

Demonstrate advanced acting techniques appropriate for full-length play production.

Employ advanced management skills appropriate for full-length play production.

Apply advanced technical Theatre skills appropriate for full-length play production.

Practice advanced run crew skills appropriate for full-length play production.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of academic achievement may include, but not be limited to, individual projects, vocabulary, theatre participation and tests. Learning activities are assessed using a rubric focusing on:

1. Meeting deadlines.
2. Working well with others.
3. Communicating with instructors and fellow students.
4. Working independently as well as in small groups.
5. Interpretation, knowledge, and demonstration of understanding of playscript in relationship to director's and designer's concepts.
6. Interpretation, knowledge, and demonstration of understanding of playscript in relationship to rehearsal/technical rehearsal/ performance process.
7. Active participation in procedures and processes related to meetings, work calls, lectures, technical rehearsals, performances, and strike.

Texts
Course materials and textbooks will be communicated by class instructor and varies depending on the semester's production.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for THEA 1902

THEA1903 - Theatre Experience III

Overview

Subject
Theater

Academic Department
Fine & Performing Arts

School
Liberal Arts

Course Description
This is the third of six experience-based one-credit courses where students work onstage, backstage, or in front-of-house operations for theatre productions during the semester. The course includes instructor presentation of specific elements of application though lecture, lecture/ demonstration and/or laboratory experience.The production work for Theatre Experience III builds on the production work completed in Theatre Experience II. In this course, the student will practice and refine techniques learned in the previous Theatre Experience course in addition to learning new parts, backstage practices, etc.

Course Pre-requisite(s)
THEA1902 Theatre Experience II or instructor permission

Credit Hours
1

Total Contact Hours
Total Instructor Contact Hours:
15

Total Student Contact Hours:
15

Academic Level
Undergraduate

Goals, Topics, and Objectives

Course Goals

1. To provide a skills-based immersion in the process of theatrical production.
2. To provide students with an opportunity to focus on a particular aspect of the theatrical production process. Application of Core Course Topics and Objectives is dependent on the student's specialization for the semester.

Core Course Topics

1. Auditions
   - Demonstrate audition technique appropriate for the play being produced.
2. Production Meetings
   - Apply cooperative behavior techniques to group meetings.
3. Casting
   - Employ casting policies and procedures appropriate for the play being produced.
4. Schedules
   - Analyze production schedules of various departments for optimum synergy.
5. Director's Concept
   - Interpret the director's concept for the appropriate production area.
6. Character Analysis
   - Apply appropriate tools to character analysis for the style at hand.
7. Blocking
   - Create appropriate movement patterns for the character portrayed.
8. Prompt Book
   - Formulate a prompt book that reflects the practical needs of the play under production.
9. Make Up
   - Design make up appropriate for the character portrayed.
10. Scenic Concepts
    - Transform scenic concepts into practical stage utilities.
11. Technical Elements
    - Adapt technical elements to the requirements of the production.
12. Dress Rehearsals
    - Execute dress rehearsals with full production elements.
13. Strike
    - Design an effective strike strategy for the semester's production.

Demonstrate audition technique appropriate for the play being produced.

Apply cooperative behavior techniques to group meetings.

Employ casting policies and procedures appropriate for the play being produced.

Analyze production schedules of various departments for optimum synergy.

Interpret the director's concept for the appropriate production area.

Apply appropriate tools to character analysis for the style at hand.

Create appropriate movement patterns for the character portrayed.

Formulate a prompt book that reflects the practical needs of the play under production.

Design make up appropriate for the character portrayed.

Transform scenic concepts into practical stage utilities.

Adapt technical elements to the requirements of the production.

Execute dress rehearsals with full production elements.

Design an effective strike strategy for the semester's production.

Evaluate dramatic literature for full-length play production.

Apply research practices to auditions, casting, rehearsals, and performances appropriate for full-length play production.

Demonstrate advanced acting techniques appropriate for full-length play production.

Employ advanced management skills appropriate for full-length play production.

Apply advanced technical Theatre skills appropriate for full-length play production.

Practice advanced run crew skills appropriate for full-length play production.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of academic achievement may include, but not be limited to, individual projects, vocabulary, theatre participation and tests. Learning activities are assessed using a rubric focusing on:

1. Meeting deadlines.
2. Working well with others.
3. Communicating with instructors and fellow students.
4. Working independently as well as in small groups.
5. Interpretation, knowledge, and demonstration of understanding of playscript in relationship to director's and designer's concepts.
6. Interpretation, knowledge, and demonstration of understanding of playscript in relationship to rehearsal/technical rehearsal/ performance process.
7. Active participation in procedures and processes related to meetings, work calls, lectures, technical rehearsals, performances, and strike.

Texts
Course materials and textbooks will be communicated by class instructor and varies depending on the semester's production.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for THEA 1903

THEA2901 - Directed Study

Overview

Subject
Theater

Academic Department
Fine & Performing Arts

School
Liberal Arts

Course Description
Allows individualized, advanced study under faculty direction in various subfields of theatre content. A Directed Study may be used to delve further into a subject than offered within the program, to individually explore a topic not otherwise accessible to a student, or to pursue an individual "practice-as-research" project. Students must obtain permission from a full-time theatre faculty member and have an instructor who has agreed to serve as mentor before the directed study will be approved. May be taken twice for credit, six hours maximum, and course subject must be different each time.

Course Pre-requisite(s)
Instructor PermissionEligible to take ENG courses at HFC

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Academic Level
Undergraduate

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
Determined by department.

Goals, Topics, and Objectives

Core Course Topics

1. To be developed by the instructor for each individual offering

To be developed by the instructor for each individual offering

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
To be developed by the instructor for each individual offering

General Course Requirements and Recommendations
To be determined by the instructor. Detailed course syllabi for each section of THEA2901 Directed Study must be approved by the Fine and Performing Arts Department prior to the course being offered. A copy of the specific course syllabus will be presented to the AEC and College Council by the Associate Dean, "For Information Only," at the first meeting after the beginning of the term the course is offered.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for THEA 2901

WELD100 - Weld Joint Design and Preparation

Overview

Subject
Industrial Technology

Academic Department
Advanced Manufacturing

School
Business, Entrepreneurshp, PD

Course Description
Covers safety rules for the welding lab and health issues such as dealing with ultraviolet rays, burns, fumes, and electrical hazards. Introduces the print symbols and terminology used in fabricating and welding basic joints that are commonly seen on mechanical prints. Introduces welding codes and standards, identification of welding flaws, and the tools used to measure aspects of the weld. Emphasizes safety protocols and proper usage of hand tools in a welding lab. Explores the set-up and use of the Oxy/Fuel cutting torch, the Oxy/Fuel line cutter, Plasma Arc cutting, safety protocols, and proper use of power tools in the welding lab. Also explores how to assemble various weld joints. Laboratory activities.

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
60

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Safety protocols.
2. Welding blueprint symbols.
3. Welding terminology.
4. Welding positions.
5. Welded joints.
6. Welding code.
7. Weld measurement.
8. Hand tools.
9. Weld flaw identification.
10. Hand tool safety.
11. Manual oxy/fuel cutting.
12. Plasma arc cutting.
13. Power tool safety and use.
14. Fabrication.
15. Oxy/fuel line cutter.

Demonstrate proper welding safety in the lab environment.

Interpret an industrial drawing with welding symbols.

Identify welding joints and welding positions.

Interpret welding terms.

Identify the correct welding code for a given weldment.

Demonstrate satisfactory knowledge of measuring tools used on weld and weldments.

Demonstrate satisfactory knowledge of hand tool safety.

Use hand tools properly.

Identify welding flaws.

Demonstrate proper set-up and use of an Oxy/Fuel cutting outfit.

Demonstrate proper set-up and use of an Oxy/Fuel line cutter.

Demonstrate proper set-up and use of a Plasma Arc Cutter.

Demonstrate proper safety and use of power tools.

Demonstrate fillet and groove joint assembly.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Quizzes and grading rubric using the American Welding Society criteria for Visual Inspection.
Grading Scale

- 98-100 = A+
- 94-97 = A
- 90-93 = A-

- 87-89 = B+
- 84-86 = B
- 77-79 = C+
- 74-76 = C
- 70-73 = C-
- 67-69 = D+
- 64-66 = D
- 60-63 = D-
- <60%= E

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for WELD 100

WELD110 - Shielded Metal Arch Welding

Overview

Subject
Industrial Technology

Academic Department
Advanced Manufacturing

School
Business, Entrepreneurshp, PD

Course Description
Examines the theory and practical operation of shielded metal arc welding in flat, horizontal, vertical and overhead welding position. Emphasizes safety protocols, machine settings, and filler metals.

Course Pre-requisite(s)
Instructor permission

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
77

Total Student Contact Hours:
77

Course Fee
80

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Safety protocols.
2. SMAW welding machine.
3. Filler metals.
4. Flat position welding.
5. Horizontal position welding.
6. Vertical welding position.
7. Overhead Welding Position

Use Welding Lab Safety protocols.
Demonstrate proper set-up of SMAW welding machine.
Describe various filler metals.
Utilize flat position welding.
Utilize horizontal position welding.
Utilize vertical position welding.
Utilize overhead position welding.
Perform multiple welds using proper welding technique for a given weldment.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Quizzes and grading rubric using the American Welding Society criteria for visual inspection.

Grading Scale

- 98-100 = A+
- 94-97 = A
- 90-93 = A-
- 87-89 = B+
- 84-86 = B
- 77-79 = C+
- 74-76 = C
- 70-73 = C-
- 67-69 = D+
- 64-66 = D
- 60-63 = D-
- <60%= E

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for WELD 110

WELD120 - Gas Tungsten Arc Welding

Overview

Subject
Industrial Technology

Academic Department
Advanced Manufacturing

School
Business, Entrepreneurshp, PD

Course Description
This covers theory and operation of gas tungsten arc welding equipment. Emphasizes safety protocols, machine settings, filler metals and welding technique for steel, stainless steel and aluminum metals.

Course Pre-requisite(s)
Instructor permission.

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
62

Total Student Contact Hours:
62

Course Fee
80

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Safety
2. GTAW welding machine
3. Filler metals
4. Flat weld position on steel
5. Flat weld position on stainless steel
6. Horizontal weld position on steel
7. Horizontal weld position on stainless steel
8. Vertical welding position on steel.
9. Vertical welding position on stainless steel.
10. Flat welding on aluminum
11. Horizontal welding on aluminum
12. Vertical welding on aluminum

Demonstrate proper safety practices for the Gas Tungsten Arc Welding process.

Prepare the Gas Tungsten Arc Welding machine for a given metal type and thickness.

Select the proper filler metal for a given weldment using the Gas Tungsten Arc Welding process.

Demonstrate the proper welding technique in flat position with steel, stainless steel and aluminum.

Demonstrate the proper welding technique in horizontal position with steel, stainless steel and aluminum.

Demonstrate the proper welding technique in vertical position with steel, stainless steel and aluminum.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Quizzes and grading rubric using the American Welding Society criteria for visual inspection.

Grading Scale

- 98-100 = A+
- 94-97 = A
- 90-93 = A-
- 87-89 = B+
- 84-86 = B
- 77-79 = C+
- 74-76 = C
- 70-73 = C-
- 67-69 = D+
- 64-66 = D
- 60-63 = D-
- <60%= E

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for WELD 120

WELD130 - Gas Metal Arc Welding

Overview

Subject
Industrial Technology

Academic Department
Advanced Manufacturing

School
Business, Entrepreneurshp, PD

Course Description
Covers theory, machine settings, filler metals, and operation of gas metal arc welding. Emphasizes safety protocols, flat, horizontal, vertical and overhead welding positions using steel.

Course Pre-requisite(s)
Instructor permission

Credit Hours
2

Total Contact Hours

Total Instructor Contact Hours:
32

Total Student Contact Hours:
32

Course Fee
60

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Safety
2. GMAW welding machine
3. Filler metal
4. Flat position welding
5. Horizontal position welding
6. Vertical welding position
7. Overhead welding position

Demonstrate proper safety practices for the Gas Metal Arc Welding process.

Prepare the Gas Metal Arc Welding machine for a given metal type and thickness.

Select the proper filler metal for a given weldment using the Gas Metal Arc Welding process.

Demonstrate the proper welding technique in flat position.

Demonstrate the proper welding technique in horizontal position.

Demonstrate the proper welding technique in vertical position.

Demonstrate the proper welding technique in overhead position.

Perform welds using proper preparation and welding technique for a given weldment.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Quizzes and grading rubric using the American Welding Society criteria for visual inspection.

Grading Scale

- 98-100 = A+
- 94-97 = A
- 90-93 = A-
- 87-89 = B+
- 84-86 = B
- 77-79 = C+
- 74-76 = C
- 70-73 = C-
- 67-69 = D+
- 64-66 = D
- 60-63 = D-
- <60%= E

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for WELD 130

WELD140 - Weld Metallurgy (Ferrous Metals)

Overview

Subject
Industrial Technology

Academic Department
Advanced Manufacturing

School
Business, Entrepreneurshp, PD

Course Description
This course covers the mechanical and physical properties and the crystalline structures of ferrous metals. This course also explores the methods to hardening and softening of ferrous metals.

Credit Hours
1

Total Contact Hours
Total Instructor Contact Hours:
16

Total Student Contact Hours:
16

Course Fee
30

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Ferrous metals
2. Crystal Structure
3. Iron/Carbon Phase Diagram
4. Heat Treating

Describe different types of ferrous metal.

Describe the crystal structure of carbon steels.

Describe the effects of heat treating on carbon steel.

Explain the effects of heating and cooling of steel using the Iron/Carbon phase diagram.

Explores the effects of alloying of steel.

Explores the effects of annealing and tempering of steel.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Quizzes

Grading Scale

- 98-100 = A+
- 94-97 = A
- 90-93 = A-
- 87-89 = B+
- 84-86 = B
- 77-79 = C+
- 74-76 = C
- 70-73 = C-
- 67-69 = D+
- 64-66 = D
- 60-63 = D-
- <60%= E

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for WELD 140

WELD141 - Weld Metallurgy (Non-Ferrous Metals)

Overview

Subject
Industrial Technology

Academic Department
Adv Manufacturing/Fabrication

School
Business, Entrepreneurshp, PD

Course Description
Examines the mechanical and physical properties, and the crystalline structures of non ferrous metals. Also covers alloying and phase diagrams associated with non-ferrous metals like aluminum and copper.

Credit Hours
1

Total Contact Hours
Total Instructor Contact Hours:
16

Total Student Contact Hours:
16

Course Fee
30

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Aluminum
2. Copper
3. Titanium
4. Phase Diagrams
5. Alloying
6. Heat treating

Describe different types of non ferrous metals.

Identify and explain phase diagrams.

Explain the effects of alloying on non ferrous metals.

Explain the effects of heat treating of non ferrous metals.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Quizzes

Grading Scale

- 98-100 = A+
- 94-97 = A
- 90-93 = A-
- 87-89 = B+
- 84-86 = B
- 77-79 = C+
- 74-76 = C
- 70-73 = C-
- 67-69 = D+
- 64-66 = D
- 60-63 = D-
- <60%= E

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for WELD 141

WELD210 - Pipe Welding

Overview

Subject
Industrial Technology

Academic Department
Adv Manufacturing/Fabrication

School
Business, Entrepreneurshp, PD

Course Description
This course introduces safety protocols and the proper preparation used to weld pipe. This course explores the welding technique for pipe welding in 2G, 5G and 6G welding positions along with sockets and flanges.

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
90

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Safety protocols.
2. Pipe preparation and alignment.
3. Open root pass.
4. 2G welding position.
5. 5G welding position.
6. 6G welding position.
7. Socket and flange joints.

Demonstrate proper safety practices for pipe welding.

Identify and explain the 2G, 5G and 6G pipe welding positions.

Demonstrate the proper alignment techniques for welded pipe joints.

Demonstrate proper welding technique for an open root pass on plate.

Perform a weld using the proper techniques for the 2G, 5G and 6G positions using the preferred welding process.

Perform a weld using the proper techniques for socket and flange using the preferred welding process.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Quizzes and grading rubric using the American Welding Society criteria for visual inspection.

Grading Scale

- 98-100 = A+
- 94-97 = A
- 90-93 = A-
- 87-89 = B+
- 84-86 = B
- 77-79 = C+
- 74-76 = C
- 70-73 = C-
- 67-69 = D+
- 64-66 = D
- 60-63 = D-
- <60%= E

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for WELD 210

WELD220 - Tool & Die Welding

Overview

Subject
Industrial Technology

Academic Department
Adv Manufacturing/Fabrication

School
Business, Entrepreneurshp, PD

Course Description
This course covers safety protocols, preparation, and the proper welding techniques used to weld tool steel used in tools and dies.

Credit Hours
2

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
90

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Safety.
2. Tool steels.
3. Filler metals.
4. Preparation procedures.
5. Weld procedures.
6. GTAW and SMAW pad build-up.
7. GTAW and SMAW line build-up.
8. GTAW and SMAW knife edge.

Demonstrate proper safety practices for tool and die welding.

Identify and explain tool steels.

Identify the proper filler metals used in the repair of tools and dies.

Explain the proper preparation techniques for the repair of a tool or a die.

Explain the proper welding procedures for the repair of a tool or die.

Perform a weld using the proper techniques for the repair of a tool or die using the Gas Tungsten Arc Welding process.

Perform a weld using the proper techniques for the repair of a tool or die using the Shielded Metal Arc Welding process.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Quizzes and grading rubric using the American Welding Society criteria for visual inspection.

Grading Scale

- 98-100 = A+
- 94-97 = A
- 90-93 = A-
- 87-89 = B+
- 84-86 = B
- 77-79 = C+
- 74-76 = C
- 70-73 = C-
- 67-69 = D+
- 64-66 = D
- 60-63 = D-
- <60%= E

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for WELD 220

WELD230 - Welding Certficate Preparation/Practice

Overview

Subject
Industrial Technology

Academic Department
Adv Manufacturing/Fabrication

School
Business, Entrepreneurshp, PD

Course Description
This course covers the proper preparation needed to perform a weld for certification.

Credit Hours
1

Total Contact Hours
Total Instructor Contact Hours:
32

Total Student Contact Hours:
32

Course Fee
80

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Assembly of test
2. Welding test
3. Testing of coupons

Demonstrate assembly of a weld test.

Perform a weld using the proper technique to successfully complete a weld.

Perform the proper testing method to successfully complete a weld.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Quizzes and grading rubric using the American Welding Society criteria for visual inspection.

Grading Scale

- 98-100 = A+
- 94-97 = A
- 90-93 = A-
- 87-89 = B+
- 84-86 = B
- 77-79 = C+
- 74-76 = C
- 70-73 = C-
- 67-69 = D+
- 64-66 = D
- 60-63 = D-
- <60%= E

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for WELD 230

WELD242 - Weld Metallurgy (Weld Test Procedure)

Overview

Subject
Industrial Technology

Academic Department
Adv Manufacturing/Fabrication

School
Business, Entrepreneurshp, PD

Course Description
This course introduces the destructive and non-destructive testing equipment and procedures used in the evaluation of welds. Covers how to evaluate the results against a welding standard and write a report on those findings.

Credit Hours
1

Total Contact Hours
Total Instructor Contact Hours:
32

Total Student Contact Hours:
32

Course Fee
60

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Bend testing
2. Break testing
3. Macroetch
4. Ultrasonic testing
5. X-Ray testing
6. Magnaflux testing
7. Heat affected zone

Identify and explain bend and break tests as destructive weld tests.

Identify and explain various non destructive weld tests.

Demonstrate destructive weld test procedures.

Demonstrate non destructive weld test procedures.

Evaluate destructive and non destructive weld test results.

Explain the heat affected zone in a welded joint.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Quizzes and grading rubric using the American Welding Society criteria for visual inspection and destructive testing of weld coupons.

Grading Scale

- 98-100 = A+
- 94-97 = A
- 90-93 = A-
- 87-89 = B+
- 84-86 = B
- 77-79 = C+
- 74-76 = C
- 70-73 = C-
- 67-69 = D+
- 64-66 = D
- 60-63 = D-
- <60%= E

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for WELD 242

WELD260 - Welding Fabrication Project

Overview

Subject
Industrial Technology

Academic Department
Adv Manufacturing/Fabrication

School
Business, Entrepreneurshp, PD

Course Description
This capstone course for the welding program emphasizes the critical thinking aspects of developing, designing, and planning a fabrication project.

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
90

Academic Level
Undergraduate

Goals, Topics, and Objectives

Core Course Topics

1. Conceptualize
2. Design
3. Planning
4. Materials and costs
5. Cutting
6. Machining
7. Welding
8. Components
9. Quality control
10. Final assembly

Devise a product to be produced in the welding lab.

Design the product to be made.

Formulate a plan to be used to move this product to the fabrication stage.

Determine materials used and material costs for the project.

Prepare materials for the project.

Perform the needed joining methods for the project.

Examine and assess any flaws that need to be addressed before final assembly.

Construct the fabricated parts and components to produce a final product.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Grading rubric using the American Welding Society criteria for visual inspection.

Grading Scale

- 98-100 = A+
- 94-97 = A
- 90-93 = A-
- 87-89 = B+
- 84-86 = B
- 77-79 = C+
- 74-76 = C
- 70-73 = C-
- 67-69 = D+
- 64-66 = D
- 60-63 = D-
- <60%= E

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for WELD 260

WR130 - Introduction to Study of World Religions

Overview

Subject
Religious Studies

Academic Department
Humanities

School
Liberal Arts

Course Description
WR-130 is an introduction to the academic study of religion. In this context, "academic" refers both to an objective approach to course material and to the emphasis on scholars whose writings have helped shape the field of religious studies. Through the works of Kant, Otto, Feuerbach, Marx and others, students examine various ways that "religion," as a category of academic inquiry, has been defined. In addition, through the lens of critical theory, they explore the thought of contemporary scholars as it pertains to definitions of religion and the role of religion in promoting or reducing the power of given social groups.

Course Pre-requisite(s)
Eligible to take ENG courses at HFC

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
10

Academic Level
Undergraduate

General Education Category
Social Sciences, Humanities and Fine Arts

Michigan Transfer Agreement (MTA) Category
Category 4: Social Sciences - Applied Degrees, Category 4: Social Sciences - Transfer Degrees, Category 5: Humanities and Fine Arts - Applied Degrees, Category 5: Humanities and Fine Arts - Transfer Degrees

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
Determined by department

Goals, Topics, and Objectives

Core Course Topics

1. Differences Between Theology and Religious Studies
    1. Describe the primary characteristics of religious studies and theology.
    2. Differentiate between religious studies and theology.
2. The Enlightenment
    1. Identify the main intellectual themes associated with The Enlightenment.
    2. Examine challenges presented to traditional religion by various Enlightenment thinkers.
3. Immanuel Kant and the Separation of Phenomena and Noumena
    1. Describe Kant's epistemological emphasis on reason.
    2. Compare Kant's definitions of phenomena and noumena.
    3. Discuss his justification for claiming that religious knowledge is uncertain.
4. Rudolf Otto and Religion as The Numinous
    1. Discuss Otto's definition of religion as "feeling".
    2. Describe Otto's idea of The Numinous (The Holy).
    3. Appraise the meanings Otto intended for the terms used in the phrase "mysterium tremendum et fascinans".
5. Ludwig Feuerbach and Religion as Illusion
    1. Explain Feuerbach's resistance to Hegelian idealism.
    2. Describe Feuerbach's definition of religion.
    3. Discuss what Feuerbach means by the phrase "theology is anthropology".
6. Karl Marx and Religion as Deception
    1. Describe relationships between the definitions of religion offered by Feuerbach and Marx.
    2. Discuss the four types of alienation identified by Marx.
    3. Critique the proposal that Marx was opposed to religion.
7. Introduction to Critical Theory
    1. Identify primary ways that Marx's ideas serve as the foundation for Critical Theory.
    2. Describe why critical theorists focus on studies of culture.
    3. Compare the concepts "ideology" and "hegemony" as proposed by Antonio Gramsci.
8. Postcolonialism and Religion
    1. Define what Edward Said is referring to through his use of the term "Orientalism".
    2. Discuss how Christian perspectives of Islam as a threat served as a precursor to "Orientalism".
    3. Describe ways that ideology and hegemony function within Orientalist discourse.
9. Religion in America
    1. Identify several ways that Protestant Christianity in particular has shaped widely-held American values.
    2. Critique the claim that sexism in America is founded in and supported by Biblical scriptures.
    3. Describe how racism in America might be connected, at least in part, to traditional Christian ideas of supremacy over other religions and their related cultures.
10. Feminism and Religion
    1. Investigate the idea that what feminists refer to as patriarchy is rooted in Biblical concepts of relationships between men and women.
    2. Explain what bell hooks means when she says that feminism is for everybody.
11. Race and Religion
    1. Discuss what scholar Charles Long means when he says that the way most scholars think about religion in America is biased.
    2. Describe how, according to Long, colonists first arriving in what came to be called America viewed and treated the religious beliefs and practices of non-European people that they met.
    3. Explain how, according to Long, colonists' use of Enlightenment categories such as "civilized" were not innocent, but rather served as ideological expressions that served hegemonic interests.

Describe the primary characteristics of religious studies and theology.

Differentiate between religious studies and theology.

Identify the main intellectual themes associated with The Enlightenment.

Examine challenges presented to traditional religion by various Enlightenment thinkers.

Describe Kant's epistemological emphasis on reason.

Discuss his justification for claiming that religious knowledge is uncertain.

Discuss Otto's definition of religion as "feeling".

Describe Otto's idea of The Numinous (The Holy).

Appraise the meanings Otto intended for the terms used in the phrase "mysterium tremendum et fascinans".

Explain Feuerbach's resistance to Hegelian idealism.

Describe Feuerbach's definition of religion.

Discuss what Feuerbach means by the phrase "theology is anthropology".

Describe relationships between the definitions of religion offered by Feuerbach and Marx.

Discuss the four types of alienation identified by Marx.

Critique the proposal that Marx was opposed to religion.

Identify primary ways that Marx's ideas serve as the foundation for Critical Theory.

Describe why critical theorists focus on studies of culture.

Compare the concepts "ideology" and "hegemony" as proposed by Antonio Gramsci.

Define what Edward Said is referring to through his use of the term "Orientalism".

Discuss how Christian perspectives of Islam as a threat served as a precursor to "Orientalism".

Describe ways that ideology and hegemony function within Orientalist discourse.

Identify several ways that Protestant Christianity in particular has shaped widely-held American values.

Critique the claim that sexism in America is founded in and supported by Biblical scriptures.

Describe how racism in America might be connected, at least in part, to traditional Christian ideas of supremacy over other religions and their related cultures.

Investigate the idea that what feminists refer to as patriarchy is rooted in Biblical concepts of relationships between men and women.

Explain what bell hooks means when she says that feminism is for everybody.

Discuss what scholar Charles Long means when he says that the way most scholars think about religion in America is biased.

Describe how, according to Long, colonists first arriving in what came to be called America viewed and treated the religious beliefs and practices of non-European people that they met.

Explain how, according to Long, colonists' use of Enlightenment categories such as "civilized" were not innocent but rather served as ideological expressions that served hegemonic interests.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment of student learning will be accomplished through a combination of quizzes, response papers, and projects.

Grading Scale

- 92-100% = A
- 89-91% = A-
- 87-88% = B+
- 82-86% = B
- 79-81% = B-
- 77-78% = C+
- 70-76% = C
- 60-70% = D
- 59% and below = E

Texts
Required course materials are on file with the department.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for WR 130

WR131 - Religious Traditions in the World

Overview

Subject
Religious Studies

Academic Department
Humanities

School
Liberal Arts

Course Description
Introduces the beliefs, practices, and experiences of the major world religious traditions. In addition to examining the particulars of each faith, this course emphasizes current perspectives in religious studies that serve to clarify the nature and functions of religion as a force shaping, and being shaped by, the increasingly pluralistic contemporary world. Religion will be treated seriously as an important part of people's identity and a crucial prerequisite for understanding and appreciating others and selves.

Course Pre-requisite(s)
Eligible to take ENG courses at HFC.

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
10

Academic Level
Undergraduate

General Education Category
Humanities and Fine Arts

Michigan Transfer Agreement (MTA) Category
Category 5: Humanities and Fine Arts - Applied Degrees, Category 5: Humanities and Fine Arts - Transfer Degrees

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
Determined by department.

Goals, Topics, and Objectives

Course Goals
To promote religious literacy, civil discourse, mutual respect and critical thinking.

Core Course Topics

1. Understanding Religion
2. The academic approach to Religious Studies
3. Indigenous Religions
4. Hinduism
5. Buddhism
6. Chinese Religions
7. Judaism
8. Christianity
9. Islam
10. Contemporary challenges to the future of religion

Explain the nature of religion and its key characteristics.

Identify and analyze the most important events, personalities, places, and stories/texts of the world's major religious traditions.

Describe the basic beliefs, practices, and histories of the world's major religious traditions.

Demonstrate the powerful interaction between religions and their wider cultural contexts and explain how the mingling of the two often leads to popular misunderstandings of religion.

Critically analyze some major tensions existing between certain religious traditions, for example rival truth claims.

Critically analyze how ongoing developments in science, technology, and the converging global society impact religious traditions.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Each instructor will identify and implement appropriate methods to assess the achievement of the learning objectives for the course. Such methods could include objective style tests, essays, research papers, journals, projects, etc.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for WR 131

WR232 - West Religion: Christian, Judaism, Islam

Overview

Subject
Religious Studies

Academic Department
Humanities

School
Liberal Arts

Course Description
Explores the differences and commonalities among Judaism, Christianity, and Islam. Discusses how to help sensitize others to the diverse ways that Western religious traditions pursue the basic questions of ultimate reality. Also examines how to define religion, explore its function and purpose, and identify the origins of Western religious motifs still very much in evidence in the twentieth century.

Course Pre-requisite(s)
Eligible to take ENG courses at HFC.

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
10

Academic Level
Undergraduate

General Education Category
Humanities and Fine Arts

Michigan Transfer Agreement (MTA) Category
Category 5: Humanities and Fine Arts - Applied Degrees, Category 5: Humanities and Fine Arts - Transfer Degrees

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
Determined by department

Goals, Topics, and Objectives

Core Course Topics

1. What is monotheism?
2. The covenant in the Hebrew scriptures
3. Assyrian and Babylonian invasions; exile and return
4. The book of Job and 'Man's Search for Meaning'
5. The yearnings and expectations of the 'end of days' before, during and after Jesus
6. Biblical and Rabbinical Judaism; the shaping of Mishnah and Talmud
7. The religion of Jesus transformed into the religion about Jesus; The New Testament
8. Paul and early Christian factions
9. Creeds, Trinity, and original sin
10. The Great Schism and the Protestant Reformation
11. The Arab world before Muhammad
12. Muhammad, the Qur'an and Hadith
13. The succession; Shiah and Sunna factions
14. The succession; Shiah and Sunna factions
15. Extremism and fundamentalism in religions

Describe an understanding of time and chronology in theological study.

Analyze and interpret historical and theological events.

Identify the relationships between the monotheistic religions.

Describe an understanding of historical continuity and change.

Explain the major events, personalities, and places in religious history covered in this course.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Each instructor will identify and implement appropriate methods to assess the achievement of the learning objectives for the course. *Such methods could include objective style tests, essays, research papers, journals, projects, etc.*

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for WR 232

WR233 - Eastern Religions

Overview

Subject
Religious Studies

Academic Department
Humanities

School
Liberal Arts

Course Description
Introduces the beliefs, practices, and experiences of major Eastern religions. Explores Eastern religious philosophies as a whole complex worldview, as well as investigates the unique beliefs and practices of several Eastern religions. Also exams historical roots, developmental growth as well as modern versions of major Eastern religions which enables the student to understand the perspective of Eastern religious philosophies.

Course Pre-requisite(s)
Eligible to take ENG courses at HFC.

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
10

Academic Level
Undergraduate

General Education Category
Humanities and Fine Arts

Michigan Transfer Agreement (MTA) Category
Category 5: Humanities and Fine Arts - Applied Degrees, Category 5: Humanities and Fine Arts - Transfer Degrees

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
Determined by department

Goals, Topics, and Objectives

Core Course Topics

1. Introduction to the academic study of religion
2. Overview of some common features of Eastern religions
3. The worlds of Hinduism
4. Buddhism
5. Major Chinese traditions: Taoism and Confucianism
6. Hinduisms
7. Chinese religion

Describe various methodologies employed in the academic study of religion.

Analyze how typical Eastern religious worldviews compare and contrast with typical Western worldviews.

Identify and discern various beliefs, practices and sociological groupings of some major Eastern religions.

Analyze the development of the largest Eastern religions identifying the origins as well as main branches.

Identify and analyze the most important events, personalities and places in the major religions of the East.

Analyze the influence of Eastern religions on contemporary world cultures.

Demonstrate a respectful tolerance for and understanding of diverse religious and cultural perspectives.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment methods are left to the discretion of our departmental faculty. Such methods could include objective style tests, essays, research papers, journals, projects, etc.

Texts

1. Religions of Asia, Ninian Smart, Prentice Hall, 1993.
2. The Sacred Paths of the East, Second Edition, Theodore M. Ludwig, Prentice Hall, 2001.
3. The Hindu Religious Tradition, Thomas J. Hopkins, Wadsworth Publishing Company, 1971.
4. Buddhism, William R. LaFleur, Prentice Hall, 1988.
5. Japanese Religious Traditions, Michiko Yusa, Prentice Hall, 2002.
6. Chinese Religion, Fourth Edition, Laurence G. Thompson, Wadsworth Publishing Company, 1989.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for WR 233

WR235 - Christianity - The First 1000 Years

Overview

Subject
Religious Studies

Academic Department
Humanities

School
Liberal Arts

Course Description
Introduces the origins of Christianity beginning with the figure of Jesus and his portrayal in early Christian writings. Studies the early teachings and their influence on later Christian theological understanding of the nature of Jesus through readings in the New Testament. Also explores the historical development of Christianity from its origins in Palestine beginning 1 B.C.E. through its expansion into the Roman Empire and ending at the schism between the Eastern Orthodox Church and the Western Catholic Church in the 1054 C.E.

Course Pre-requisite(s)
Eligible to take ENG courses at HFC.

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Academic Level
Undergraduate

General Education Category
Humanities and Fine Arts

Michigan Transfer Agreement (MTA) Category
Category 5: Humanities and Fine Arts - Applied Degrees, Category 5: Humanities and Fine Arts - Transfer Degrees

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
Determined by department

Goals, Topics, and Objectives

Course Goals
This course explores the development of Christianity and its influence on the Roman pagan world as it moved from a small Jewish cult into a world religion.

Core Course Topics

1. The political and religious conflicts faced by Jews living in a Greco-Roman world.
2. The Jewish longing for a messianic deliverer, and how this is reflected in the teachings of Jesus.
3. The impact of the destruction of the Second Temple in Jerusalem on Judaism and early Jesus followers.
4. The message and meaning of The Synoptic Gospels.
5. The influence of Paul and early pagan believers.
6. The theological conflicts between Peter and Paul.
7. The evolution of basic Christian theology.
8. The early Christian theologies that thrived, died, or survived.
9. How did paganism influence Christianity?
10. The final adoption of Christianity as the state religion.
11. The growing rift between the Latin West and Greek East.
12. The final break between Eastern Orthodoxy and the Western Latin Church.

Evaluate the religious conflicts facing Jews, and early Jesus followers.

Compare and contrast the differing ideals held by Jews and Christians concerning a messianic deliverer.

Evaluate the impact of the destruction of the Jewish Temple.

Compare and contrast the similarities and differences in the Synoptic Gospels of Matthew, Mark and Luke.

Describe the influence of Paul on the development of early Christianity.

Summarize the conflicts between Peter and Paul.

Compare and contrast early Christianities.

Explain the reasons for adoption of Christianity by the Roman Empire as the state religion.

Analyze pagan influences on Christianity.

Explain the reasons for the break between the Eastern Orthodox church and the Western Latin church.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Each instructor will identify appropriate methods to assess the achievement of the learning objectives for the course. Such methods could include objective style tests, essays, research papers, journals, and/or projects.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for WR 235

WR236 - African American Religious Exp/Expressi

Overview

Subject
Religious Studies

Academic Department
Humanities

School
Liberal Arts

Course Description
Examines the African American religious experience and expression in America. Explores the historical, social, political, and economic factors which participated in the design of the African American church, considering African American theology, worship styles, sacred music, and the pivotal model of the African American pastor.

Course Pre-requisite(s)
Eligible to take ENG courses at HFC.

Credit Hours
3

Total Contact Hours
Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
10

Academic Level
Undergraduate

General Education Category
Humanities and Fine Arts

Michigan Transfer Agreement (MTA) Category
Category 5: Humanities and Fine Arts - Transfer Degrees, Category 5: Humanities and Fine Arts - Applied Degrees

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
Determined by department

Goals, Topics, and Objectives

Core Course Topics

1. West African and American Worldviews
    1. Identify the historical and cultural factors that created the development of the African American religious experience.
    2. Describe the factors that develop a person's worldview.
    3. Explain the differences in African American worldviews and Euro American worldviews.
2. West African and Euro American Religious Cultural Distinctions
    1. Identify the factors of West African religiosity.
    2. Describe the cultural distinctions of Euro American religiosity.
    3. Explain the major tenets of African American religion.
3. The Slave's Religion
    1. Describe the major components of slave religion.
    2. Identify the major factors in slave religion-Blackanity from Christianity.
    3. Delineate the components which made slave religion socially and culturally acceptable to the slave.
    4. Describe the reasons for and against Christianizing the slaves.
4. "The Invisible Church"
    1. Identify the social and cultural factors that made for such a social entity.
    2. Evaluate the social and personal perspectives that enhanced "The Invisible Church".
    3. Analyze the factors that kept "The Invisible Church" separate but added to its growth."
5. The African American Worship Experience
    1. Demonstrate an understanding of the historical, social and psychological components evident in African American Worship expressions.
    2. Describe the significant factors that make the African American Worship experience unique as a worship form.
6. Black Sacred Music, Spirituals, Gospels, Meters, Hymns, Songs of Improvisation
    1. Describe the various types of Black Sacred Music.
    2. Explain the historical and social factors that created their development.
7. The African American Pastor
    1. Describe the historical, cultural and social factors that made the pastor person so influential.
    2. Describe the various roles and responsibilities of the pastor.
8. African American Theology
    1. Describe the major tenets of African American theology.
    2. Correlate how one's theology impacts one's political and social expressions.
9. African American Theology and Liberation Theology and the African American Woman
    1. Describe the major tenets of liberation theology and womanist theology from an African American perspective.
10. The African American Church as a Social Institution
    1. Describe the social factors that make the African American Church one of the leading social institutions in the African American community.
    2. Analyze the social structure of the African American Church as a family, community center, both a place of praise-sacred and place of protest-political."
    3. Evaluate the impact of the church as a social agency on the personal and social development of individuals.

Identify the historical and cultural factors that created the development of the African American religious experience.

Describe the factors that develop a person's worldview.

Explain the differences in African American worldviews and Euro American worldviews.

Identify the factors of West African religiosity.

Describe the cultural distinctions of Euro American religiosity.

Explain the major tenets of African American religion.

Describe the major components of slave religion.

Identify the major factors in slave religion-Blackanity from Christianity.

Delineate the components which made slave religion socially and culturally acceptable to the slave.

Describe the reasons for and against Christianizing the slaves.

Identify the social and cultural factors that made for such a social entity.

Evaluate the social and personal perspectives that enhanced "The Invisible Church".

Analyze the factors that kept "The Invisible Church" separate but added to its growth.

Demonstrate an understanding of the historical, social and psychological components evident in African American Worship expressions.

Describe the significant factors that make the African American Worship experience unique as a worship form.

Describe the various types of Black Sacred Music.

Explain the historical and social factors that created their development.

Describe the historical, cultural and social factors that made the pastor person so influential.

Describe the various roles and responsibilities of the pastor.

Describe the major tenets of African American theology.

Correlate how one's theology impacts one's political and social expressions.

Describe the major tenets of liberation theology and womanist theology from an African American perspective.

Describe the social factors that make the African American Church one of the leading social institutions in the African American community.

Analyze the social structure of the African American Church as a family, community center, both a place of praise-sacred and place of protest-political.

Evaluate the impact of the church as a social agency on the personal and social development of individuals.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Each instructor will identify appropriate methods to assess the achievement of the learning objectives for the course. Such methods could include objective style tests, essays, research papers, journals, and/or projects.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for WR 236

WR240 - Myths & Symbols:Deciphering Sacred Trad

Overview

Subject
Religious Studies

Academic Department
Humanities

School
Liberal Arts

Course Description
Introduces the academic study of religious myths. Examines spiritual and religious perspectives of cultures as sources of myths. Analyzes symbols, themes, and plots, enabling the student to identify common characteristics and patterns in myths originating in various cultures and religions throughout human history.

Course Pre-requisite(s)
Eligible to take ENG courses at HFC.

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
15

Academic Level
Undergraduate

General Education Category
Humanities and Fine Arts

Michigan Transfer Agreement (MTA) Category
Category 5: Humanities and Fine Arts - Applied Degrees, Category 5: Humanities and Fine Arts - Transfer Degrees

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Other

Credit for Prior College Level Learning (CPCLL) Details
Determined by department

Goals, Topics, and Objectives

Core Course Topics

1. Introduction to the study of world mythology
    1. Characteristics of mythology
    2. Themes, symbolism and meaning in mythology
    3. Analytical approaches to mythology
2. Mythology of Various Cultures
    1. Egyptian
    2. Mesopotamian
    3. Greek
    4. Roman
    5. Indian
    6. Western monotheistic religions
3. Comparison and Analysis of Mythology
    1. Creation myths
    2. Flood myths
    3. Morality myths
    4. Hero myths
    5. Myths pertaining to experience of death
    6. Myths pertaining to end of the world

Decipher and compare and contrast some main themes and symbols present in myths originating in various religions and cultures.

Distinguish the unique characteristics of myths as well as the spiritual contribution of myths within respective religions or cultures.

Analyze the influence of ancient myths on modern North American culture.

Identify and analyze symbolic meanings of myths in religious texts.

Identify and analyze the transmission as well as progression of symbols and schemas of religious myths throughout human history.

Demonstrate a respectful tolerance for and understanding of diverse religious and cultural perspectives.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Assessment methods are left to the discretion of departmental faculty. Such methods could include objective style tests, essays, research papers, journals, projects, etc.

Texts

1. Mythology: The Illustrated Anthology of World Myth & Storytelling, C. Scott Littleton, General Editor, Duncan Baird Publishers, 2002.
2. A Short History of Myth, Karen Armstrong, Canongate, 2005.
3. Thou Art That, Joseph Campbell, New World Library, 2001.
4. Parallel Myths, J.F. Bierlein, Ballantine Wellspring – The Random House Publishing Group, 1994.
5. World Mythology, Roy Willis, General Editor, Oxford University Press, 1993, 2006.
6. Myth: A Biography of Belief, David Leeming, Oxford University Press, 2002.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for WR 240

WR241 - Islam

Overview

Subject
Religious Studies

Academic Department
Humanities

School
Liberal Arts

Course Description
Introduces and explores the history, beliefs, practices, and experiences of Islam. Examines Islam starting from its origins discussing the life and times of the Prophet Muhammad, the Quran, and the further development of Muslim beliefs, way of life, and traditions to the present.

Course Pre-requisite(s)
Eligible to take ENG courses at HFC.

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
10

Academic Level
Undergraduate

General Education Category
Humanities and Fine Arts

Michigan Transfer Agreement (MTA) Category
Category 5: Humanities and Fine Arts - Applied Degrees, Category 5: Humanities and Fine Arts - Transfer Degrees

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Portfolio Review

Credit for Prior College Level Learning (CPCLL) Details
Portfolio Review

Goals, Topics, and Objectives

Core Course Topics

1. The origin and basic history of Islam
    - Summarize the general character of religion in pre-Islamic Arabia
    - Identify the relationship between Abraham's experiences and the development of monotheism
    - Analyze the life and times of Muhammad
    - Discuss the spread of Islam from Muhammad's day to modern times
2. Central beliefs of Islam
    - Identify and discuss the central beliefs of Islam. Those may include, but are not limited to beliefs concerning:
        - God
        - Humans
        - Prophets and messengers
        - Angels and jinn
        - The Day of Judgment
3. Muslim rituals and practices
    - Analyze and discuss The Five PIllars of Islam
    - Explain other rituals as appropriate to a given instructor's syllabus. Such rituals may include, but are not limited to:
        - Prayer at the mosque
        - Halal foods
        - Circumcision
        - Marriage ceremonies
        - Practices related to death
        - Eid al-Adha
        - Eid al-Fitr
4. Major texts of Islam
    - Explain aspects of the Qur'an. Connect this information, as it fits specific course syllabi, with current events.
    - Discuss aspects of hadith. Connect this information, as it fits specific course syllabi, with current events.
    - Analyze additional literature, as appropriate to a given instructor's syllabus. Such literature may include, but is not necessarily limited to:
        - Tawrat
        - Zabur
        - Injil
5. The two main branches of Islam
    - Summarize the conflict that erupted over choosing a successor to Muhammad and how that resulted in the emergence of today's two major branches of Islam: Sunni and Shia
    - Analyze similarities between Shia and Sunni
    - Analyze differences between Shia and Sunni
    - Identify, geographically, where major population of Shia and Sunni, respectively, are located worldwide
6. Sufism: Islamic Mysticism
    - Discuss the term "mysticism"
    - Explain that mystical approaches to religious understanding exist in various extant religions
    - Summarize the rise, main personalities, primary ideas, and spread of Sufism
    - Analyze Sufi texts, be these prose or poetry, introducing students to the religious content and meaning of Sufi writings
7. Muslims in North America
    - Describe the arrival of Muslims in North America into the early 1900s
    - Discuss the origin and primary personalities of the Black Muslims.
    - Recognize differences between Nation of Islam and the American Muslim Mission
    - Compare and contrast religious and cultural diversity among Muslims in North American today
8. Islamic Revivalism
    - Identify and discuss Muslim responses to the spread of Euro-American ("Western") religious and cultural ideals. Subjects selected by the instructor for discussion may include, but are not limited to:
        - Wahabism
        - Qutbism
        - Salafism
        - Fatwas and contemporary jihad

Summarize the general character of religion in pre-Islamic Arabia.

Identify the relationship between Abraham's experiences and the development of monotheism.

Analyze the life and times of Muhammad.

Discuss the spread of Islam from Muhammad's day to modern times.

Identify and discuss the central beliefs of Islam. Those may include, but are not limited to beliefs concerning God, Humans, Prophets and messengers, Angels and jinn.

Analyze and discuss The Five PIllars of Islam.

Explain other rituals as appropriate to a given instructor's syllabus. Such rituals may include but are not limited to: Prayer at the mosque, Halal foods, Circumcision, Marriage. ceremonies, and Practices related to death.

Explain aspects of the Qur'an. Connect this information, as it fits specific course syllabi, with current events.

Discuss aspects of hadith. Connect this information, as it fits specific course syllabi, with current events.

Analyze additional literature, as appropriate to a given instructor's syllabus. Such literature may include, but is not necessarily limited to: Tawrat, Zabur, Injil.

Summarize the conflict that erupted over choosing a successor to Muhammad and how that resulted in the emergence of today's two major branches of Islam: Sunni and Shia.

Analyze similarities between Shia and Sunni.

Analyze differences between Shia and Sunni.

Identify, geographically, where major population of Shia and Sunni, respectively, are located worldwide.

Discuss the term "mysticism".

Explain that mystical approaches to religious understanding exist in various extant religions.

Summarize the rise, main personalities, primary ideas, and spread of Sufism.

Analyze Sufi texts, be these prose or poetry, introducing students to the religious content and meaning of Sufi writings.

Describe the arrival of Muslims in North America into the early 1900s.

Discuss the origin and primary personalities of the Black Muslims.

Recognize differences between Nation of Islam and the American Muslim Mission.

Compare and contrast religious and cultural diversity among Muslims in North American today.

Identify and discuss Muslim responses to the spread of Euro-American ("Western") religious and cultural ideals.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Each instructor will identify and implement appropriate methods to assess the achievement of the learning objectives of the course. These methods can include, but are not necessarily limited to multiple-choice, matching, and essay examinations, as well as out-of-class papers, Internet assignments, audio and/or video conferences, and projects.

Texts
Texts will be selected by instructors.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for WR 241

WR280 - Topics in Religious Studies

Overview

Subject
Religious Studies

Academic Department
Humanities

School
Liberal Arts

Course Description
Special topics course offerings are available in Religious Studies. Topics may vary. Additional course details may be obtained from the current semester's class schedule or through the School of Liberal Arts office. Religious Studies topics courses may be taken up to two times for credit, six credit hour hours maximum, but the topics for each course must be different.

Course Pre-requisite(s)
Eligible to take ENG courses at HFC.

Credit Hours
3

Total Contact Hours

Total Instructor Contact Hours:
47

Total Student Contact Hours:
47

Course Fee
10

Academic Level
Undergraduate

General Education Category
Humanities and Fine Arts

Michigan Transfer Agreement (MTA) Category
Category 5: Humanities and Fine Arts - Applied Degrees, Category 5: Humanities and Fine Arts - Transfer Degrees

Eligible for Credit for Prior College Level Learning (CPCLL)
Yes

Acceptable Prior Learning Credit
Portfolio Review

Credit for Prior College Level Learning (CPCLL) Details
Portfolio Review

Goals, Topics, and Objectives

Core Course Topics

1. Methodology
    1. Apply the methodology or methodologies of the discipline to a given issue. See individual syllabus for details.
2. Content-specific issue
    1. Identify and give the significance of the issue of the specific course.
    2. Develop and evaluate solutions to a problem or problems relevant to the specific issue if applicable.
    3. See individual syllabus for details of content.

Apply the methodology or methodologies of the discipline to a given issue.
Identify and give the significance of the issue of the specific course.
Develop and evaluate solutions to a problem or problems relevant to the specific issue if applicable.

Assessment, Requirements, and Outcomes

Assessment of Academic Achievement
Each instructor will identify and implement appropriate methods to assess the achievement of the learning objectives for the course.

Texts
Each instructor will identify and implement appropriate texts and/or other resources for the specific topic.

Register for this Course

The link below will re-direct students out of our catalog and into HFC's Self-Service system. HFC log-in credentials required.
Register for WR 280

Course Sets

CAT1 - Gen Ed Applied - 2020

Complete ANY:

- Complete ANY:
    - ENG131 - Introduction to College Writing
    - ENG131A - Introduction to College Writing (ALP)
    - ENG131H - Honors Introduction to College Writing
    - ENG132 - College Writing and Research
    - ENG132H - Honors College Writing and Research
    - ENG135 - Business & Technical Writing & Research

Computer Technology - 2020

Complete ANY:

- ART111 - Digital Media
- ART275 - Advanced Projects
- CIS100 - Introduction to Information Technology
- CIS221 - Instructional Tech Educators (Pre K-12)
- ENGR125 - Introduction Computation for Engineers
- HCS131 - Computers in Health Care
- MUS156 - Music Technology
- TAFD117 - Industrial Computer Applications

Gen Ed - 1 hr - 2025

- CRJ234 - Criminalistics: Criminal Investigation
- ASL140 - Fingerspelling and Numbering
- MCA241 - Media Writing
- MCA132 - Film History and Criticism
- MCA131 - Intoduction to Media Communication
- MATH222 - Mathematics for Elementary Teachers II
- MATH122 - Mathematics for Elementary Teachers I
- POLS150 - Leadership, Organizing & Public Service
- BLDI150 - Lighting & Environmental Systems Interio
- BLDI140 - Interior Design Materials & Components
- BLDI130 - Design & User Needs
- BLDI120 - Principles of Design
- HUM251H - Great Works
- EDU250 - Humanities & Performing Arts Educators
- HUM204 - Introductio to American Cultural Studies
- MUS154 - Arab Music Appreciation
- CIS119 - Math for Computer Professional
- SPN130 - Introduction to Hispanic Cultures
- HUM105 - World Civilization I
- ART229 - Survey of Contemporary Art
- EDU296 - Exceptional Child
- EDU256 - Educational Psychology
- MATH165 - Mathematics for Calculus
- CIS294 - Software Engineering
- GEOG221 - Geography of the Middle East
- MATH288 - Differential Equations
- WR280 - Topics in Religious Studies
- WR241 - Islam
- HON161 - Honors Colloquium
- ENG131A - Introduction to College Writing (ALP)

- ASL232 - Intermediate American Sign Language II
- ASL231 - Intermediate American Sign Language I
- ASL135 - Fingerspelling and Numbering
- ASL132 - Elementary American Sign Language II
- PHIL201 - Eastern Philosophy
- PHIL130 - Introduction to Philosophy
- ASL131 - Elementary American Sign Language I
- SOC212 - Leadership Diverse Communities Organizat
- AUTO135 - Mathematics for the Technician
- WR235 - Christianity - The First 1000 Years
- POLS295 - Community Leadership Internship (Inactive)
- POLS202 - Foreign Policy: Topics & Analysis
- POLS201 - Public Policy: Topics & Analysis
- PHIL138 - Moral Issues in Biotechnology
- POLS101 - Am Gov:Democrat Partic Civic Engagement
- HIST286 - The U S and the Vietnam War
- HIST285 - The U S and the Second World War
- HIST270 - The American Civil War
- HIST261 - The Modern Middle East
- HIST258 - The Revolutionary War Era
- HIST254 - History of Michigan
- MATH131 - Mathematics for the Modern World
- EDU260 - History in Elementary Schools
- ENG132H - Honors College Writing and Research
- ENG131H - Honors Introduction to College Writing
- WR236 - African American Religious Exp/Expressi
- THEA138 - Stage Costuming
- ART227 - History of Arab Art & Architecture
- ARA130 - Pre-Elementary Arabic
- ART226 - African and Afro American Art
- THEA238 - Theatre History
- ART225 - Asian Art: Art of India & SE Asia
- THEA135 - Introduction to Stage Makeup
- THEA131 - Theatre Appreciation
- CRJ126 - Introduction to Homeland Security
- GEOG138 - Geography of Michigan
- INTR181 - Principles of Design
- CHEM111 - Chem Skills Pre-Professional Programs
- SOC253 - Sociology of Deviance
- ART221 - Medieval Art
- PSY257 - Health Psychology
- ARA232 - Intermediate Arabic II
- SCI212 - Earth Science for Educators
- ANTH154 - Food, Culture, and Economy
- ARA231 - Intermediate Arabic I
- POLS200 - Introduction to Peace and Conflict
- MATH104 - Mathematics for Food Service Careers
- MATH141 - Introduction to Statistics
- WR240 - Myths & Symbols:Deciphering Sacred Trad
- CRJ140 - Identity Theft: Prevention and Awareness
- BIO139 - Environmental Science Laboratory
- PSCI135 - Sound & Light in Fine-Arts
- MATH275 - Discrete Mathematics
- ITAL132 - Elementary Italian II
- ANTH153 - Introduction to Archaeology
- WR233 - Eastern Religions
- WR232 - West Religion: Christian, Judaism, Islam
- ITAL131 - Elementary Italian I
- BIO138 - Environmental Science Lecture
- ENG236 - American Autobiography
- ENG232 - Introduction to the Short Story
- ART107 - Photoshop
- SCI210 - Intro to Science for Elementary Educator
- SCI213 - Learning By Inquiry: Life Science
- PSY251 - Abnormal Psychology
- ENGR130 - Introduction to Engineering
- BIO150 - Biology: Organisms, Genes, and Ecology
- BIO152 - Cell and Molecular Biology
- ART224 - Art of Islam
- HON251 - Great Works
- SOC251 - Ethnic & Racial Diversity in Society
- HON151 - Honor Colloquium-History Culture Detroit
- CHEM244 - Microscale Organic Chemistry Lab II
- PSY253 - Lifespan Development
- MUS130 - Music Appreciation
- MATH101 - Mathematics for Health Careers
- HUM101 - Introduction to the Humanities
- CRJ285 - Topics in Criminal Justice/Law Enfor
- ATMS131 - Weather and Climate
- BIO135 - Microbiology for Allied Health Sciences
- ENG246 - Introduction to Children's Literature
- ARA132 - Elementary Arabic II
- TCM241 - Media Writing
- TCM132 - Film History and Criticism
- TCM131 - Introduction to Telecommunication
- MUS133 - Exploring Popular Music
- ENG135 - Business & Technical Writing & Research
- ENG248 - African American Literature
- ARA131 - Elementary Arabic I
- TAFD130 - Industrial Applications Physical Science
- ASTR133 - Introductory Astronomy Laboratory
- ART135 - Art Appreciation
- TAMA120 - Industrial Applications Algebraic Princi
- MUS238 - Music Theory 3
- MUS233 - History of Western Music 2
- MUS232 - History of Western Music 1
- MUS138 - Music Theory 1
- ENG234 - Topics in Literature
- ENG233 - Introduction to the Novel
- WR130 - Introduction to Study of World Religions
- CHEM243 - Microscale Organic Chemistry Lab I
- CHEM242 - Organic Chemistry II
- WR131 - Religious Traditions in the World
- SPN232 - Intermediate Spanish II
- SPN231 - Intermediate Spanish I
- SPN132 - Elementary Spanish II
- SPN131 - Elementary Spanish I
- SPC145 - Interpersonal Communication
- SPC131 - Intro to Public Speaking
- SOC254 - Social Psychology
- SOC152 - Women, Men, and Society
- SOC151 - Contemporary Social Problems
- SOC132 - Marriage & the Family
- SOC131 - Introduction to Sociology
- PSY254 - Social Psychology
- PSY152 - Child Psychology
- PSY131 - Introductory Psychology
- PSCI131 - Introduction to Physical Science
- POLS155 - State & Local Government
- POLS152 - International Relations
- POLS135 - American Legal System & Process
- POLS131 - Intro to American Gov't & Politi Science
- PHYS232 - Engineering Physics II
- PHYS231 - Engineering Physics I
- PHYS133 - Principles of Physics
- PHYS132 - General Physics II
- PHYS131 - General Physics I
- PHIL139 - Ethics
- PHIL137 - Topics in Philosophy
- PHIL135 - History of Modern Philosophy
- PHIL133 - History of Philosophy to 18th Century
- PHIL131 - Introduction to Logic
- MUS142 - Aural Music Skills 2
- MUS141 - Aural Music Skills 1
- MUS139 - Music Theory 2
- MUS134 - Music Fundamentals
- MUS132 - Music Literature
- MATH283 - Linear Algebra
- MATH280 - Calculus III
- MATH183 - Calculus II
- MATH180 - Calculus I
- MATH175 - Precalculus
- MATH115 - College Algebra
- MATH112 - Trigonometry
- MATH110 - Intermediate Algebra
- MATH103 - Technical Mathematics
- MATH100 - Basic Technical Mathematics
- JOUR131 - News Writing
- HIST152 - Modern American History
- HIST151 - Early American History
- HIST113 - Modern World History
- HIST112 - Medieval-Early Modern World History
- HIST111 - Ancient World History
- GER232 - Second-Year German IV
- GER231 - Second-Year German III
- GER132 - Elementary German II
- GER131 - Elementary German I
- GEOL131 - Physical Geology
- GEOG132 - World Regional Geography
- GEOG131 - Environmental Geography
- FRE232 - Second-Year French IV
- FRE231 - Second-Year French III
- FRE132 - Elementary French II
- FRE131 - Elementary French I
- ENGR232 - Statics
- ENGR201 - Science of Materials
- ENG245 - The Bible as Literature
- ENG243 - Women's Literature
- ENG241 - Shakespeare
- ENG237 - American Literature Since 1900
- ENG235 - American Literature Before 1900
- ENG231 - Intro to Literature: Poetry and Drama
- ENG139 - Creative Writing
- ENG132 - College Writing and Research
- ENG131 - Introduction to College Writing
- CRJ252 - Criminal Procedure
- CRJ251 - Criminal Law
- CRJ138 - Probation and Parole
- CRJ136 - Introduction to Corrections
- CRJ135 - Juvenile Justice
- CRJ134 - Criminal Investigation
- CRJ132 - Police Admin - Staff and Line Operations
- CRJ131 - Intro Law Enforcement & Criminal Justice
- CHEM241 - Organic Chemistry I
- CHEM142 - Principles Gen & Inorganic Chemistry II
- CHEM141 - Principles Gen & Inorganic Chemistry I
- CHEM132 - Principles Organic&Biological Chemistry
- CHEM131 - Principles of Chemistry
- BMA110 - Business Math
- BIO251 - Microbiology
- BIO234 - Anatomy and Physiology II
- BIO233 - Anatomy and Physiology I
- BIO143 - Zoology
- BIO134 - Essentials of Anatomy and Physiology
- BIO131 - Introduction to Biology
- BIO130 - Evolution and Behavior
- BEC152 - Principles of Microeconomics
- BEC151 - Principles of Macroeconomics
- ASTR131 - Descriptive Astronomy
- ART130 - History of Graphic Design
- ART123 - History of Modern Art
- ART122 - Art History Survey II
- ART121 - Art History I - Pre-Historic to Medieval
- ANTH152 - Middle Eastern Peoples and Cultures
- ANTH151 - Cultures of North America
- ANTH131 - Introduction to Anthropology

Gen Ed - 3 hrs - 2025

- CRJ234 - Criminalistics: Criminal Investigation
- ASL140 - Fingerspelling and Numbering
- MCA241 - Media Writing
- MCA132 - Film History and Criticism
- MCA131 - Intoduction to Media Communication
- MATH222 - Mathematics for Elementary Teachers II
- MATH122 - Mathematics for Elementary Teachers I
- POLS150 - Leadership, Organizing & Public Service
- BLDI150 - Lighting & Environmental Systems Interio

- BLDI140 - Interior Design Materials & Components
- BLDI130 - Design & User Needs
- BLDI120 - Principles of Design
- HUM251H - Great Works
- EDU250 - Humanities & Performing Arts Educators
- HUM204 - Introductio to American Cultural Studies
- MUS154 - Arab Music Appreciation
- CIS119 - Math for Computer Professional
- SPN130 - Introduction to Hispanic Cultures
- HUM105 - World Civilization I
- ART229 - Survey of Contemporary Art
- EDU296 - Exceptional Child
- EDU256 - Educational Psychology
- MATH165 - Mathematics for Calculus
- CIS294 - Software Engineering
- GEOG221 - Geography of the Middle East
- MATH288 - Differential Equations
- WR280 - Topics in Religious Studies
- WR241 - Islam
- HON161 - Honors Colloquium
- ENG131A - Introduction to College Writing (ALP)
- ASL232 - Intermediate American Sign Language II
- ASL231 - Intermediate American Sign Language I
- ASL135 - Fingerspelling and Numbering
- ASL132 - Elementary American Sign Language II
- PHIL201 - Eastern Philosophy
- PHIL130 - Introduction to Philosophy
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- POLS201 - Public Policy: Topics & Analysis
- PHIL138 - Moral Issues in Biotechnology
- POLS101 - Am Gov:Democrat Partic Civic Engagement
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- HIST285 - The U S and the Second World War
- HIST270 - The American Civil War
- HIST261 - The Modern Middle East
- HIST258 - The Revolutionary War Era
- HIST254 - History of Michigan
- MATH131 - Mathematics for the Modern World
- EDU260 - History in Elementary Schools
- ENG132H - Honors College Writing and Research
- ENG131H - Honors Introduction to College Writing
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- CRJ138 - Probation and Parole
- CRJ136 - Introduction to Corrections
- CRJ135 - Juvenile Justice
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- CRJ132 - Police Admin - Staff and Line Operations
- CRJ131 - Intro Law Enforcement & Criminal Justice
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- CHEM131 - Principles of Chemistry
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- BIO134 - Essentials of Anatomy and Physiology
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- BIO130 - Evolution and Behavior
- BEC152 - Principles of Microeconomics

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- ASTR131 - Descriptive Astronomy
- ART130 - History of Graphic Design
- ART123 - History of Modern Art
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- ANTH152 - Middle Eastern Peoples and Cultures
- ANTH151 - Cultures of North America
- ANTH131 - Introduction to Anthropology

Gen Ed - 5 hrs - 2025

- CRJ234 - Criminalistics: Criminal Investigation
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- MCA241 - Media Writing
- MCA132 - Film History and Criticism
- MCA131 - Intoduction to Media Communication
- MATH222 - Mathematics for Elementary Teachers II
- MATH122 - Mathematics for Elementary Teachers I
- POLS150 - Leadership, Organizing & Public Service
- BLDI150 - Lighting & Environmental Systems Interio
- BLDI140 - Interior Design Materials & Components
- BLDI130 - Design & User Needs
- BLDI120 - Principles of Design
- HUM251H - Great Works
- EDU250 - Humanities & Performing Arts Educators
- HUM204 - Introductio to American Cultural Studies
- MUS154 - Arab Music Appreciation
- CIS119 - Math for Computer Professional
- SPN130 - Introduction to Hispanic Cultures
- HUM105 - World Civilization I
- ART229 - Survey of Contemporary Art
- EDU296 - Exceptional Child
- EDU256 - Educational Psychology
- MATH165 - Mathematics for Calculus
- CIS294 - Software Engineering
- GEOG221 - Geography of the Middle East
- MATH288 - Differential Equations
- WR280 - Topics in Religious Studies
- WR241 - Islam
- HON161 - Honors Colloquium
- ENG131A - Introduction to College Writing (ALP)
- ASL232 - Intermediate American Sign Language II
- ASL231 - Intermediate American Sign Language I
- ASL135 - Fingerspelling and Numbering
- ASL132 - Elementary American Sign Language II
- PHIL201 - Eastern Philosophy
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- SOC212 - Leadership Diverse Communities Organizat
- AUTO135 - Mathematics for the Technician
- WR235 - Christianity - The First 1000 Years
- POLS295 - Community Leadership Internship (Inactive)
- POLS202 - Foreign Policy: Topics & Analysis
- POLS201 - Public Policy: Topics & Analysis
- PHIL138 - Moral Issues in Biotechnology
- POLS101 - Am Gov:Democrat Partic Civic Engagement
- HIST286 - The U S and the Vietnam War
- HIST285 - The U S and the Second World War
- HIST270 - The American Civil War
- HIST261 - The Modern Middle East
- HIST258 - The Revolutionary War Era
- HIST254 - History of Michigan
- MATH131 - Mathematics for the Modern World
- EDU260 - History in Elementary Schools
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- THEA131 - Theatre Appreciation
- CRJ126 - Introduction to Homeland Security
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- CHEM111 - Chem Skills Pre-Professional Programs
- SOC253 - Sociology of Deviance
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- ANTH154 - Food, Culture, and Economy
- ARA231 - Intermediate Arabic I
- POLS200 - Introduction to Peace and Conflict
- MATH104 - Mathematics for Food Service Careers
- MATH141 - Introduction to Statistics
- WR240 - Myths & Symbols:Deciphering Sacred Trad
- CRJ140 - Identity Theft: Prevention and Awareness
- BIO139 - Environmental Science Laboratory
- PSCI135 - Sound & Light in Fine-Arts
- MATH275 - Discrete Mathematics
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- ANTH153 - Introduction to Archaeology
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- SCI213 - Learning By Inquiry: Life Science
- PSY251 - Abnormal Psychology
- ENGR130 - Introduction to Engineering
- BIO150 - Biology: Organisms, Genes, and Ecology
- BIO152 - Cell and Molecular Biology
- ART224 - Art of Islam
- HON251 - Great Works
- SOC251 - Ethnic & Racial Diversity in Society
- HON151 - Honor Colloquium-History Culture Detroit
- CHEM244 - Microscale Organic Chemistry Lab II
- PSY253 - Lifespan Development
- MUS130 - Music Appreciation
- MATH101 - Mathematics for Health Careers
- HUM101 - Introduction to the Humanities
- CRJ285 - Topics in Criminal Justice/Law Enfor
- ATMS131 - Weather and Climate
- BIO135 - Microbiology for Allied Health Sciences
- ENG246 - Introduction to Children's Literature
- ARA132 - Elementary Arabic II
- TCM241 - Media Writing
- TCM132 - Film History and Criticism
- TCM131 - Introduction to Telecommunication
- MUS133 - Exploring Popular Music
- ENG135 - Business & Technical Writing & Research
- ENG248 - African American Literature
- ARA131 - Elementary Arabic I
- TAFD130 - Industrial Applications Physical Science
- ASTR133 - Introductory Astronomy Laboratory
- ART135 - Art Appreciation
- TAMA120 - Industrial Applications Algebraic Princi
- MUS238 - Music Theory 3
- MUS233 - History of Western Music 2
- MUS232 - History of Western Music 1
- MUS138 - Music Theory 1
- ENG234 - Topics in Literature
- ENG233 - Introduction to the Novel
- WR130 - Introduction to Study of World Religions
- CHEM243 - Microscale Organic Chemistry Lab I
- CHEM242 - Organic Chemistry II
- WR131 - Religious Traditions in the World
- SPN232 - Intermediate Spanish II
- SPN231 - Intermediate Spanish I
- SPN132 - Elementary Spanish II
- SPN131 - Elementary Spanish I
- SPC145 - Interpersonal Communication
- SPC131 - Intro to Public Speaking
- SOC254 - Social Psychology
- SOC152 - Women, Men, and Society
- SOC151 - Contemporary Social Problems
- SOC132 - Marriage & the Family
- SOC131 - Introduction to Sociology
- PSY254 - Social Psychology
- PSY152 - Child Psychology
- PSY131 - Introductory Psychology
- PSCI131 - Introduction to Physical Science
- POLS155 - State & Local Government
- POLS152 - International Relations
- POLS135 - American Legal System & Process
- POLS131 - Intro to American Gov't & Politi Science
- PHYS232 - Engineering Physics II
- PHYS231 - Engineering Physics I
- PHYS133 - Principles of Physics
- PHYS132 - General Physics II
- PHYS131 - General Physics I
- PHIL139 - Ethics
- PHIL137 - Topics in Philosophy
- PHIL135 - History of Modern Philosophy
- PHIL133 - History of Philosophy to 18th Century
- PHIL131 - Introduction to Logic
- MUS142 - Aural Music Skills 2
- MUS141 - Aural Music Skills 1
- MUS139 - Music Theory 2
- MUS134 - Music Fundamentals
- MUS132 - Music Literature
- MATH283 - Linear Algebra
- MATH280 - Calculus III
- MATH183 - Calculus II
- MATH180 - Calculus I
- MATH175 - Precalculus
- MATH115 - College Algebra
- MATH112 - Trigonometry
- MATH110 - Intermediate Algebra
- MATH103 - Technical Mathematics
- MATH100 - Basic Technical Mathematics
- JOUR131 - News Writing
- HIST152 - Modern American History
- HIST151 - Early American History
- HIST113 - Modern World History
- HIST112 - Medieval-Early Modern World History
- HIST111 - Ancient World History
- GER232 - Second-Year German IV
- GER231 - Second-Year German III
- GER132 - Elementary German II
- GER131 - Elementary German I
- GEOL131 - Physical Geology
- GEOG132 - World Regional Geography
- GEOG131 - Environmental Geography
- FRE232 - Second-Year French IV
- FRE231 - Second-Year French III
- FRE132 - Elementary French II
- FRE131 - Elementary French I
- ENGR232 - Statics
- ENGR201 - Science of Materials
- ENG245 - The Bible as Literature
- ENG243 - Women's Literature
- ENG241 - Shakespeare
- ENG237 - American Literature Since 1900
- ENG235 - American Literature Before 1900
- ENG231 - Intro to Literature: Poetry and Drama
- ENG139 - Creative Writing
- ENG132 - College Writing and Research
- ENG131 - Introduction to College Writing
- CRJ252 - Criminal Procedure

- CRJ251 - Criminal Law
- CRJ138 - Probation and Parole
- CRJ136 - Introduction to Corrections
- CRJ135 - Juvenile Justice
- CRJ134 - Criminal Investigation
- CRJ132 - Police Admin - Staff and Line Operations
- CRJ131 - Intro Law Enforcement & Criminal Justice
- CHEM241 - Organic Chemistry I
- CHEM142 - Principles Gen & Inorganic Chemistry II
- CHEM141 - Principles Gen & Inorganic Chemistry I
- CHEM132 - Principles Organic&Biological Chemistry
- CHEM131 - Principles of Chemistry
- BMA110 - Business Math
- BIO251 - Microbiology
- BIO234 - Anatomy and Physiology II
- BIO233 - Anatomy and Physiology I
- BIO143 - Zoology
- BIO134 - Essentials of Anatomy and Physiology
- BIO131 - Introduction to Biology
- BIO130 - Evolution and Behavior
- BEC152 - Principles of Microeconomics
- BEC151 - Principles of Macroeconomics
- ASTR131 - Descriptive Astronomy
- ART130 - History of Graphic Design
- ART123 - History of Modern Art
- ART122 - Art History Survey II
- ART121 - Art History I - Pre-Historic to Medieval
- ANTH152 - Middle Eastern Peoples and Cultures
- ANTH151 - Cultures of North America
- ANTH131 - Introduction to Anthropology

CAT6 - Gen Ed Applied - 2020

Complete ANY:

- ASTR131 - Descriptive Astronomy
- ASTR133 - Introductory Astronomy Laboratory
- BIO130 - Evolution and Behavior
- BIO131 - Introduction to Biology
- BIO134 - Essentials of Anatomy and Physiology
- BIO135 - Microbiology for Allied Health Sciences
- BIO143 - Zoology
- BIO150 - Biology: Organisms, Genes, and Ecology
- BIO233 - Anatomy and Physiology I
- BIO234 - Anatomy and Physiology II
- BIO251 - Microbiology
- CHEM111 - Chem Skills Pre-Professional Programs
- CHEM131 - Principles of Chemistry
- CHEM132 - Principles Organic&Biological Chemistry
- CHEM141 - Principles Gen & Inorganic Chemistry I
- CHEM142 - Principles Gen & Inorganic Chemistry II
- CHEM241 - Organic Chemistry I
- CHEM242 - Organic Chemistry II
- CHEM243 - Microscale Organic Chemistry Lab I
- CHEM244 - Microscale Organic Chemistry Lab II
- BIO138 - Environmental Science Lecture
- BIO139 - Environmental Science Laboratory
- ENGR130 - Introduction to Engineering
- ENGR201 - Science of Materials
- ENGR232 - Statics
- GEOL131 - Physical Geology
- ATMS131 - Weather and Climate
- PHYS131 - General Physics I
- PHYS132 - General Physics II
- PHYS133 - Principles of Physics
- PHYS231 - Engineering Physics I
- PHYS232 - Engineering Physics II
- PSCI131 - Introduction to Physical Science
- PSCI135 - Sound & Light in Fine-Arts
- SCI210 - Intro to Science for Elementary Educator
- SCI212 - Earth Science for Educators
- SCI213 - Learning By Inquiry: Life Science
- TAFD130 - Industrial Applications Physical Science

Wellness - 2020

Complete ANY:

- Complete ANY:
  - BFN130 - Beginning Investment
  - BFN141 - Personal Finance
- Complete ANY:
  - COUN110 - Human Potential Seminar
  - COUN114 - Stress Management - A Personal Approach
  - COUN119 - Issues in Personal Growth
  - COUN125 - Life Work Planning
  - COUN128 - Active Parenting
- Complete ANY:
  - HPE151 - Methods for Teaching Exercise
  - HPE192 - Internship in Physical Education (Inactive)
  - HPE253 - Nutrition for the Professional

CAT4 - Gen Ed Applied - 2020

Complete ANY:

- Complete ANY:
  - ANTH131 - Introduction to Anthropology
  - ANTH151 - Cultures of North America
  - ANTH152 - Middle Eastern Peoples and Cultures
  - ANTH153 - Introduction to Archaeology
  - ANTH154 - Food, Culture, and Economy
- Complete ANY:
  - ASL130 - Deaf Culture and the Deaf Community
- Complete ANY:
  - BEC151 - Principles of Macroeconomics
  - BEC152 - Principles of Microeconomics
- Complete ANY:
  - CRJ126 - Introduction to Homeland Security
  - CRJ131 - Intro Law Enforcement & Criminal Justice
  - CRJ132 - Police Admin - Staff and Line Operations
  - CRJ134 - Criminal Investigation
  - CRJ135 - Juvenile Justice
  - CRJ136 - Introduction to Corrections
  - CRJ138 - Probation and Parole
  - CRJ140 - Identity Theft: Prevention and Awareness
  - CRJ234 - Criminalistics: Criminal Investigation
  - CRJ251 - Criminal Law
  - CRJ252 - Criminal Procedure
  - CRJ285 - Topics in Criminal Justice/Law Enfor
- Complete ANY:
  - EDU256 - Educational Psychology
  - EDU260 - History in Elementary Schools
  - EDU296 - Exceptional Child
- Complete ANY:
  - GEOG131 - Environmental Geography
  - GEOG132 - World Regional Geography
  - GEOG138 - Geography of Michigan
  - GEOG221 - Geography of the Middle East
- Complete ANY:
  - HIST111 - Ancient World History
  - HIST112 - Medieval-Early Modern World History
  - HIST113 - Modern World History
  - HIST151 - Early American History
  - HIST152 - Modern American History
  - HIST254 - History of Michigan
  - HIST258 - The Revolutionary War Era
  - HIST261 - The Modern Middle East
  - HIST270 - The American Civil War
  - HIST285 - The U S and the Second World War
  - HIST286 - The U S and the Vietnam War
- Complete ANY:
  - POLS101 - Am Gov:Democrat Partic Civic Engagement
  - POLS131 - Intro to American Gov't & Politi Science
  - POLS150 - Leadership, Organizing & Public Service
  - POLS152 - International Relations
  - POLS155 - State & Local Government
  - POLS200 - Introduction to Peace and Conflict
  - POLS201 - Public Policy: Topics & Analysis
  - POLS202 - Foreign Policy: Topics & Analysis
- Complete ANY:
  - PSY131 - Introductory Psychology
  - PSY152 - Child Psychology
  - PSY251 - Abnormal Psychology
  - PSY253 - Lifespan Development
  - PSY254 - Social Psychology
  - PSY257 - Health Psychology
- Complete ANY:
  - SOC131 - Introduction to Sociology
  - SOC132 - Marriage & the Family
  - SOC151 - Contemporary Social Problems
  - SOC152 - Women, Men, and Society
  - SOC212 - Leadership Diverse Communities Organizat
  - SOC251 - Ethnic & Racial Diversity in Society
  - SOC253 - Sociology of Deviance
  - SOC254 - Social Psychology
- Complete ANY:
  - SPN130 - Introduction to Hispanic Cultures
- Complete ANY:
  - WR130 - Introduction to Study of World Religions

CAT3 - Gen Ed Applied - 2025

Complete ANY:

- AUTO135 - Mathematics for the Technician
- BMA110 - Business Math
- CIS119 - Math for Computer Professional
- ENGR232 - Statics
- MATH100 - Basic Technical Mathematics
- MATH101 - Mathematics for Health Careers
- MATH103 - Technical Mathematics
- MATH104 - Mathematics for Food Service Careers
- MATH110 - Intermediate Algebra
- MATH112 - Trigonometry
- MATH115 - College Algebra
- MATH122 - Mathematics for Elementary Teachers I
- MATH131 - Mathematics for the Modern World
- MATH141 - Introduction to Statistics
- MATH165 - Mathematics for Calculus
- MATH175 - Precalculus
- MATH180 - Calculus I
- MATH183 - Calculus II
- MATH222 - Mathematics for Elementary Teachers II
- MATH275 - Discrete Mathematics
- MATH280 - Calculus III
- MATH283 - Linear Algebra
- MATH288 - Differential Equations
- TAMA120 - Industrial Applications Algebraic Princi

CAT3 Stats - Gen Ed Transfer - 2025

Complete ANY:

- MATH141 - Introduction to Statistics

CAT3 QL - Gen Ed Transfer - 2025

Complete ANY:

- Complete ANY:
  - MATH122 - Mathematics for Elementary Teachers I
  - MATH131 - Mathematics for the Modern World
  - MATH222 - Mathematics for Elementary Teachers II

Gen Ed - 6 hrs - 2025

- CRJ234 - Criminalistics: Criminal Investigation
- ASL140 - Fingerspelling and Numbering
- MCA241 - Media Writing
- MCA132 - Film History and Criticism
- MCA131 - Intoduction to Media Communication
- MATH222 - Mathematics for Elementary Teachers II

- MATH122 - Mathematics for Elementary Teachers I
- POLS150 - Leadership, Organizing & Public Service
- BLDI150 - Lighting & Environmental Systems Interio
- BLDI140 - Interior Design Materials & Components
- BLDI130 - Design & User Needs
- BLDI120 - Principles of Design
- HUM251H - Great Works
- EDU250 - Humanities & Performing Arts Educators
- HUM204 - Introductio to American Cultural Studies
- MUS154 - Arab Music Appreciation
- CIS119 - Math for Computer Professional
- SPN130 - Introduction to Hispanic Cultures
- HUM105 - World Civilization I
- ART229 - Survey of Contemporary Art
- EDU296 - Exceptional Child
- EDU256 - Educational Psychology
- MATH165 - Mathematics for Calculus
- CIS294 - Software Engineering
- GEOG221 - Geography of the Middle East
- MATH288 - Differential Equations
- WR280 - Topics in Religious Studies
- WR241 - Islam
- HON161 - Honors Colloquium
- ENG131A - Introduction to College Writing (ALP)
- ASL232 - Intermediate American Sign Language II
- ASL231 - Intermediate American Sign Language I
- ASL135 - Fingerspelling and Numbering
- ASL132 - Elementary American Sign Language II
- PHIL201 - Eastern Philosophy
- PHIL130 - Introduction to Philosophy
- ASL131 - Elementary American Sign Language I
- SOC212 - Leadership Diverse Communities Organizat
- AUTO135 - Mathematics for the Technician
- WR235 - Christianity - The First 1000 Years
- POLS295 - Community Leadership Internship (Inactive)
- POLS202 - Foreign Policy: Topics & Analysis
- POLS201 - Public Policy: Topics & Analysis
- PHIL138 - Moral Issues in Biotechnology
- POLS101 - Am Gov:Democrat Partic Civic Engagement
- HIST286 - The U S and the Vietnam War
- HIST285 - The U S and the Second World War
- HIST270 - The American Civil War
- HIST261 - The Modern Middle East
- HIST258 - The Revolutionary War Era
- HIST254 - History of Michigan
- MATH131 - Mathematics for the Modern World
- EDU260 - History in Elementary Schools
- ENG132H - Honors College Writing and Research
- ENG131H - Honors Introduction to College Writing
- WR236 - African American Religious Exp/Expressi
- THEA138 - Stage Costuming
- ART227 - History of Arab Art & Architecture
- ARA130 - Pre-Elementary Arabic
- ART226 - African and Afro American Art
- THEA238 - Theatre History
- ART225 - Asian Art: Art of India & SE Asia
- THEA135 - Introduction to Stage Makeup
- THEA131 - Theatre Appreciation
- CRJ126 - Introduction to Homeland Security
- GEOG138 - Geography of Michigan
- INTR181 - Principles of Design
- CHEM111 - Chem Skills Pre-Professional Programs
- SOC253 - Sociology of Deviance
- ART221 - Medieval Art
- PSY257 - Health Psychology
- ARA232 - Intermediate Arabic II
- SCI212 - Earth Science for Educators
- ANTH154 - Food, Culture, and Economy
- ARA231 - Intermediate Arabic I
- POLS200 - Introduction to Peace and Conflict
- MATH104 - Mathematics for Food Service Careers
- MATH141 - Introduction to Statistics
- WR240 - Myths & Symbols:Deciphering Sacred Trad
- CRJ140 - Identity Theft: Prevention and Awareness
- BIO139 - Environmental Science Laboratory
- PSCI135 - Sound & Light in Fine-Arts
- MATH275 - Discrete Mathematics
- ITAL132 - Elementary Italian II
- ANTH153 - Introduction to Archaeology
- WR233 - Eastern Religions
- WR232 - West Religion: Christian, Judaism, Islam
- ITAL131 - Elementary Italian I
- BIO138 - Environmental Science Lecture
- ENG236 - American Autobiography
- ENG232 - Introduction to the Short Story
- ART107 - Photoshop
- SCI210 - Intro to Science for Elementary Educator
- SCI213 - Learning By Inquiry: Life Science
- PSY251 - Abnormal Psychology
- ENGR130 - Introduction to Engineering
- BIO150 - Biology: Organisms, Genes, and Ecology
- BIO152 - Cell and Molecular Biology
- ART224 - Art of Islam
- HON251 - Great Works
- SOC251 - Ethnic & Racial Diversity in Society
- HON151 - Honor Colloquium-History Culture Detroit
- CHEM244 - Microscale Organic Chemistry Lab II
- PSY253 - Lifespan Development
- MUS130 - Music Appreciation
- MATH101 - Mathematics for Health Careers
- HUM101 - Introduction to the Humanities
- CRJ285 - Topics in Criminal Justice/Law Enfor
- ATMS131 - Weather and Climate
- BIO135 - Microbiology for Allied Health Sciences
- ENG246 - Introduction to Children's Literature
- ARA132 - Elementary Arabic II
- TCM241 - Media Writing
- TCM132 - Film History and Criticism
- TCM131 - Introduction to Telecommunication
- MUS133 - Exploring Popular Music
- ENG135 - Business & Technical Writing & Research
- ENG248 - African American Literature
- ARA131 - Elementary Arabic I
- TAFD130 - Industrial Applications Physical Science
- ASTR133 - Introductory Astronomy Laboratory
- ART135 - Art Appreciation
- TAMA120 - Industrial Applications Algebraic Princi
- MUS238 - Music Theory 3
- MUS233 - History of Western Music 2
- MUS232 - History of Western Music 1
- MUS138 - Music Theory 1
- ENG234 - Topics in Literature
- ENG233 - Introduction to the Novel
- WR130 - Introduction to Study of World Religions
- CHEM243 - Microscale Organic Chemistry Lab I
- CHEM242 - Organic Chemistry II
- WR131 - Religious Traditions in the World
- SPN232 - Intermediate Spanish II
- SPN231 - Intermediate Spanish I
- SPN132 - Elementary Spanish II
- SPN131 - Elementary Spanish I
- SPC145 - Interpersonal Communication
- SPC131 - Intro to Public Speaking
- SOC254 - Social Psychology
- SOC152 - Women, Men, and Society
- SOC151 - Contemporary Social Problems
- SOC132 - Marriage & the Family
- SOC131 - Introduction to Sociology
- PSY254 - Social Psychology
- PSY152 - Child Psychology
- PSY131 - Introductory Psychology
- PSCI131 - Introduction to Physical Science
- POLS155 - State & Local Government
- POLS152 - International Relations
- POLS135 - American Legal System & Process
- POLS131 - Intro to American Gov't & Politi Science
- PHYS232 - Engineering Physics II
- PHYS231 - Engineering Physics I
- PHYS133 - Principles of Physics
- PHYS132 - General Physics II
- PHYS131 - General Physics I
- PHIL139 - Ethics
- PHIL137 - Topics in Philosophy
- PHIL135 - History of Modern Philosophy
- PHIL133 - History of Philosophy to 18th Century
- PHIL131 - Introduction to Logic
- MUS142 - Aural Music Skills 2
- MUS141 - Aural Music Skills 1
- MUS139 - Music Theory 2
- MUS134 - Music Fundamentals
- MUS132 - Music Literature
- MATH283 - Linear Algebra
- MATH280 - Calculus III
- MATH183 - Calculus II
- MATH180 - Calculus I
- MATH175 - Precalculus
- MATH115 - College Algebra
- MATH112 - Trigonometry
- MATH110 - Intermediate Algebra
- MATH103 - Technical Mathematics
- MATH100 - Basic Technical Mathematics
- JOUR131 - News Writing
- HIST152 - Modern American History
- HIST151 - Early American History
- HIST113 - Modern World History
- HIST112 - Medieval-Early Modern World History
- HIST111 - Ancient World History
- GER232 - Second-Year German IV
- GER231 - Second-Year German III
- GER132 - Elementary German II
- GER131 - Elementary German I
- GEOL131 - Physical Geology
- GEOG132 - World Regional Geography
- GEOG131 - Environmental Geography
- FRE232 - Second-Year French IV
- FRE231 - Second-Year French III
- FRE132 - Elementary French II
- FRE131 - Elementary French I
- ENGR232 - Statics
- ENGR201 - Science of Materials
- ENG245 - The Bible as Literature
- ENG243 - Women's Literature
- ENG241 - Shakespeare
- ENG237 - American Literature Since 1900
- ENG235 - American Literature Before 1900
- ENG231 - Intro to Literature: Poetry and Drama
- ENG139 - Creative Writing
- ENG132 - College Writing and Research
- ENG131 - Introduction to College Writing
- CRJ252 - Criminal Procedure
- CRJ251 - Criminal Law
- CRJ138 - Probation and Parole
- CRJ136 - Introduction to Corrections
- CRJ135 - Juvenile Justice
- CRJ134 - Criminal Investigation
- CRJ132 - Police Admin - Staff and Line Operations
- CRJ131 - Intro Law Enforcement & Criminal Justice
- CHEM241 - Organic Chemistry I
- CHEM142 - Principles Gen & Inorganic Chemistry II
- CHEM141 - Principles Gen & Inorganic Chemistry I
- CHEM132 - Principles Organic&Biological Chemistry
- CHEM131 - Principles of Chemistry
- BMA110 - Business Math
- BIO251 - Microbiology
- BIO234 - Anatomy and Physiology II
- BIO233 - Anatomy and Physiology I
- BIO143 - Zoology
- BIO134 - Essentials of Anatomy and Physiology

- BIO131 - Introduction to Biology
- BIO130 - Evolution and Behavior
- BEC152 - Principles of Microeconomics
- BEC151 - Principles of Macroeconomics
- ASTR131 - Descriptive Astronomy
- ART130 - History of Graphic Design
- ART123 - History of Modern Art
- ART122 - Art History Survey II
- ART121 - Art History I - Pre-Historic to Medieval
- ANTH152 - Middle Eastern Peoples and Cultures
- ANTH151 - Cultures of North America
- ANTH131 - Introduction to Anthropology

CAT1 - Gen Ed Transfer - 2020

Complete ANY:

- Complete ALL:
    - ENG131 - Introduction to College Writing
    - ENG131A - Introduction to College Writing (ALP)
    - ENG131H - Honors Introduction to College Writing
    - ENG132 - College Writing and Research
    - ENG132H - Honors College Writing and Research
    - ENG135 - Business & Technical Writing & Research

CAT2 - Gen Ed Applied - 2020

Complete ANY:

- Complete ANY:
    - CIS294 - Software Engineering
- Complete ANY:
    - ENG131 - Introduction to College Writing
    - ENG131A - Introduction to College Writing (ALP)
    - ENG131H - Honors Introduction to College Writing
    - ENG132 - College Writing and Research
    - ENG132H - Honors College Writing and Research
    - ENG135 - Business & Technical Writing & Research
- Complete ANY:
    - SPC131 - Intro to Public Speaking
    - SPC145 - Interpersonal Communication

CAT5 - Gen Ed Transfer - 2025

Complete ANY:

- ARA131 - Elementary Arabic I
- ARA132 - Elementary Arabic II
- ARA231 - Intermediate Arabic I
- ARA232 - Intermediate Arabic II
- ART107 - Photoshop
- ART121 - Art History I - Pre-Historic to Medieval
- ART122 - Art History Survey II
- ART123 - History of Modern Art
- ART130 - History of Graphic Design
- ART135 - Art Appreciation
- ART221 - Medieval Art
- ART224 - Art of Islam
- ART225 - Asian Art: Art of India & SE Asia
- ART226 - African and Afro American Art
- ART227 - History of Arab Art & Architecture
- ART229 - Survey of Contemporary Art
- ASL131 - Elementary American Sign Language I
- ASL132 - Elementary American Sign Language II
- ASL140 - Fingerspelling and Numbering
- ASL231 - Intermediate American Sign Language I
- ASL232 - Intermediate American Sign Language II
- EDU250 - Humanities & Performing Arts Educators
- ENG139 - Creative Writing
- ENG231 - Intro to Literature: Poetry and Drama
- ENG232 - Introduction to the Short Story
- ENG233 - Introduction to the Novel
- ENG234 - Topics in Literature
- ENG235 - American Literature Before 1900
- ENG236 - American Autobiography
- ENG237 - American Literature Since 1900
- ENG241 - Shakespeare
- ENG243 - Women's Literature
- ENG245 - The Bible as Literature
- ENG246 - Introduction to Children's Literature
- ENG248 - African American Literature
- FRE131 - Elementary French I
- FRE132 - Elementary French II
- FRE231 - Second-Year French III
- FRE232 - Second-Year French IV
- GER131 - Elementary German I
- GER132 - Elementary German II
- GER231 - Second-Year German III
- GER232 - Second-Year German IV
- HIST111 - Ancient World History
- HIST112 - Medieval-Early Modern World History
- HIST113 - Modern World History
- HIST151 - Early American History
- HIST152 - Modern American History
- HIST254 - History of Michigan
- HIST258 - The Revolutionary War Era
- HIST261 - The Modern Middle East
- HIST270 - The American Civil War
- HIST285 - The U S and the Second World War
- HIST286 - The U S and the Vietnam War
- HON151 - Honor Colloquium-History Culture Detroit
- HON161 - Honors Colloquium
- HON251 - Great Works
- HUM101 - Introduction to the Humanities
- HUM105 - World Civilization I
- HUM204 - Introductio to American Cultural Studies
- HUM251H - Great Works
- BLDI120 - Principles of Design
- BLDI130 - Design & User Needs
- BLDI140 - Interior Design Materials & Components
- BLDI150 - Lighting & Environmental Systems Interio
- INTR181 - Principles of Design
- ITAL131 - Elementary Italian I
- ITAL132 - Elementary Italian II
- JOUR131 - News Writing
- MCA131 - Intoduction to Media Communication
- MCA132 - Film History and Criticism
- MCA241 - Media Writing
- TCM131 - Introduction to Telecommunication
- TCM132 - Film History and Criticism
- TCM241 - Media Writing
- MUS130 - Music Appreciation
- MUS132 - Music Literature
- MUS133 - Exploring Popular Music
- MUS134 - Music Fundamentals
- MUS138 - Music Theory 1
- MUS139 - Music Theory 2
- MUS141 - Aural Music Skills 1
- MUS142 - Aural Music Skills 2
- MUS154 - Arab Music Appreciation
- MUS232 - History of Western Music 1
- MUS233 - History of Western Music 2
- MUS238 - Music Theory 3
- PHIL130 - Introduction to Philosophy
- PHIL131 - Introduction to Logic
- PHIL133 - History of Philosophy to 18th Century
- PHIL135 - History of Modern Philosophy
- PHIL137 - Topics in Philosophy
- PHIL138 - Moral Issues in Biotechnology
- PHIL139 - Ethics
- PHIL201 - Eastern Philosophy
- SPC131 - Intro to Public Speaking
- SPN131 - Elementary Spanish I
- SPN132 - Elementary Spanish II
- SPN231 - Intermediate Spanish I
- SPN232 - Intermediate Spanish II
- THEA131 - Theatre Appreciation
- THEA135 - Introduction to Stage Makeup
- THEA138 - Stage Costuming
- THEA238 - Theatre History
- WR130 - Introduction to Study of World Religions
- WR131 - Religious Traditions in the World
- WR232 - West Religion: Christian, Judaism, Islam
- WR233 - Eastern Religions
- WR235 - Christianity - The First 1000 Years
- WR236 - African American Religious Exp/Expressi
- WR240 - Myths & Symbols:Deciphering Sacred Trad
- WR241 - Islam
- WR280 - Topics in Religious Studies

CAT6 - Transfer - Lec Only - 2020

Complete ANY:

- Complete ANY:
    - ASTR131 - Descriptive Astronomy
- Complete ANY:
    - ATMS131 - Weather and Climate
- Complete ANY:
    - BIO130 - Evolution and Behavior
    - BIO138 - Environmental Science Lecture
- Complete ANY:
    - CHEM241 - Organic Chemistry I
    - CHEM242 - Organic Chemistry II
    - CHEM243 - Microscale Organic Chemistry Lab I
    - CHEM244 - Microscale Organic Chemistry Lab II
    - Complete ANY:
        - ENGR130 - Introduction to Engineering
        - ENGR201 - Science of Materials
        - ENGR232 - Statics

CAT3 - Quant Lit - Gen Ed Transfer - 2025

Complete ANY:

- MATH122 - Mathematics for Elementary Teachers I
- MATH131 - Mathematics for the Modern World
- MATH222 - Mathematics for Elementary Teachers II

CAT3 - Coll Algebra - Gen Ed Transfer - 2020

Complete ANY:

- MATH115 - College Algebra
- MATH165 - Mathematics for Calculus
- MATH175 - Precalculus
- MATH180 - Calculus I
- MATH183 - Calculus II
- MATH275 - Discrete Mathematics
- MATH280 - Calculus III
- MATH283 - Linear Algebra
- MATH288 - Differential Equations

CAT6 - Transfer - Lec and Lab - 2025

Complete ANY:

- Complete ANY:
    - BIO131 - Introduction to Biology
    - BIO134 - Essentials of Anatomy and Physiology
    - BIO135 - Microbiology for Allied Health Sciences
    - BIO143 - Zoology
    - BIO150 - Biology: Organisms, Genes, and Ecology
    - BIO152 - Cell and Molecular Biology
    - BIO233 - Anatomy and Physiology I
    - BIO234 - Anatomy and Physiology II
    - BIO251 - Microbiology
- Complete ANY:
    - CHEM111 - Chem Skills Pre-Professional Programs
    - CHEM131 - Principles of Chemistry
    - CHEM132 - Principles Organic&Biological Chemistry
    - CHEM141 - Principles Gen & Inorganic Chemistry I
    - CHEM142 - Principles Gen & Inorganic Chemistry II

- Complete ANY:
  - GEOL131 - Physical Geology
- Complete ANY:
  - PHYS131 - General Physics I
  - PHYS132 - General Physics II
  - PHYS133 - Principles of Physics
  - PHYS231 - Engineering Physics I
  - PHYS232 - Engineering Physics II
- Complete ANY:
  - PSCI131 - Introduction to Physical Science
  - PSCI135 - Sound & Light in Fine-Arts
- Complete ANY:
  - SCI210 - Intro to Science for Elementary Educator
  - SCI212 - Earth Science for Educators
  - SCI213 - Learning By Inquiry: Life Science

CAT4 - Gen Ed Transfer - 2020

Complete ANY:

- Complete ANY:
  - ANTH131 - Introduction to Anthropology
  - ANTH151 - Cultures of North America
  - ANTH152 - Middle Eastern Peoples and Cultures
  - ANTH153 - Introduction to Archaeology
  - ANTH154 - Food, Culture, and Economy
- Complete ANY:
  - BEC151 - Principles of Macroeconomics
  - BEC152 - Principles of Microeconomics
- Complete ANY:
  - CRJ126 - Introduction to Homeland Security
  - CRJ131 - Intro Law Enforcement & Criminal Justice
  - CRJ132 - Police Admin - Staff and Line Operations
  - CRJ134 - Criminal Investigation
  - CRJ135 - Juvenile Justice
  - CRJ136 - Introduction to Corrections
  - CRJ138 - Probation and Parole
  - CRJ140 - Identity Theft: Prevention and Awareness
  - CRJ234 - Criminalistics: Criminal Investigation
  - CRJ251 - Criminal Law
  - CRJ252 - Criminal Procedure
  - CRJ285 - Topics in Criminal Justice/Law Enfor
- Complete ANY:
  - EDU256 - Educational Psychology
  - EDU260 - History in Elementary Schools
  - EDU296 - Exceptional Child
- Complete ANY:
  - GEOG131 - Environmental Geography
  - GEOG132 - World Regional Geography
  - GEOG138 - Geography of Michigan
  - GEOG221 - Geography of the Middle East
- Complete ANY:
  - HIST111 - Ancient World History
  - HIST112 - Medieval-Early Modern World History
  - HIST113 - Modern World History
  - HIST151 - Early American History
  - HIST152 - Modern American History
  - HIST254 - History of Michigan
  - HIST258 - The Revolutionary War Era
  - HIST261 - The Modern Middle East
  - HIST270 - The American Civil War
  - HIST285 - The U S and the Second World War
  - HIST286 - The U S and the Vietnam War
- Complete ANY:
  - POLS101 - Am Gov:Democrat Partic Civic Engagement
  - POLS131 - Intro to American Gov't & Politi Science
  - POLS135 - American Legal System & Process
  - POLS150 - Leadership, Organizing & Public Service
  - POLS152 - International Relations
  - POLS155 - State & Local Government
  - POLS200 - Introduction to Peace and Conflict
  - POLS201 - Public Policy: Topics & Analysis
  - POLS202 - Foreign Policy: Topics & Analysis
- Complete ANY:
  - PSY131 - Introductory Psychology
  - PSY152 - Child Psychology
  - PSY251 - Abnormal Psychology
  - PSY253 - Lifespan Development
  - PSY254 - Social Psychology
  - PSY257 - Health Psychology
- Complete ANY:
  - SOC131 - Introduction to Sociology
  - SOC132 - Marriage & the Family
  - SOC151 - Contemporary Social Problems
  - SOC152 - Women, Men, and Society
  - SOC212 - Leadership Diverse Communities Organizat
  - SOC251 - Ethnic & Racial Diversity in Society
  - SOC253 - Sociology of Deviance
  - SOC254 - Social Psychology
- Complete ANY:
  - WR130 - Introduction to Study of World Religions

CAT6 - Gen Ed Transfer - Lab Only - 2020

Complete ANY:

- Complete ANY:
  - ASTR133 - Introductory Astronomy Laboratory
- Complete ANY:
  - BIO139 - Environmental Science Laboratory

Gen Ed - 4 hrs - 2025

- CRJ234 - Criminalistics: Criminal Investigation
- ASL140 - Fingerspelling and Numbering
- MCA241 - Media Writing
- MCA132 - Film History and Criticism
- MCA131 - Intoduction to Media Communication
- MATH222 - Mathematics for Elementary Teachers II
- MATH122 - Mathematics for Elementary Teachers I
- POLS150 - Leadership, Organizing & Public Service
- BLDI150 - Lighting & Environmental Systems Interio
- BLDI140 - Interior Design Materials & Components
- BLDI130 - Design & User Needs
- BLDI120 - Principles of Design
- HUM251H - Great Works
- EDU250 - Humanities & Performing Arts Educators
- HUM204 - Introductio to American Cultural Studies
- MUS154 - Arab Music Appreciation
- CIS119 - Math for Computer Professional
- SPN130 - Introduction to Hispanic Cultures
- HUM105 - World Civilization I
- ART229 - Survey of Contemporary Art
- EDU296 - Exceptional Child
- EDU256 - Educational Psychology
- MATH165 - Mathematics for Calculus
- CIS294 - Software Engineering
- GEOG221 - Geography of the Middle East
- MATH288 - Differential Equations
- WR280 - Topics in Religious Studies
- WR241 - Islam
- HON161 - Honors Colloquium
- ENG131A - Introduction to College Writing (ALP)
- ASL232 - Intermediate American Sign Language II
- ASL231 - Intermediate American Sign Language I
- ASL135 - Fingerspelling and Numbering
- ASL132 - Elementary American Sign Language II
- PHIL201 - Eastern Philosophy
- PHIL130 - Introduction to Philosophy
- ASL131 - Elementary American Sign Language I
- SOC212 - Leadership Diverse Communities Organizat
- AUTO135 - Mathematics for the Technician
- WR235 - Christianity - The First 1000 Years
- POLS295 - Community Leadership Internship (Inactive)
- POLS202 - Foreign Policy: Topics & Analysis
- POLS201 - Public Policy: Topics & Analysis
- PHIL138 - Moral Issues in Biotechnology
- POLS101 - Am Gov:Democrat Partic Civic Engagement
- HIST286 - The U S and the Vietnam War
- HIST285 - The U S and the Second World War
- HIST270 - The American Civil War
- HIST261 - The Modern Middle East
- HIST258 - The Revolutionary War Era
- HIST254 - History of Michigan
- MATH131 - Mathematics for the Modern World
- EDU260 - History in Elementary Schools
- ENG132H - Honors College Writing and Research
- ENG131H - Honors Introduction to College Writing
- WR236 - African American Religious Exp/Expressi
- THEA138 - Stage Costuming
- ART227 - History of Arab Art & Architecture
- ARA130 - Pre-Elementary Arabic
- ART226 - African and Afro American Art
- THEA238 - Theatre History
- ART225 - Asian Art: Art of India & SE Asia
- THEA135 - Introduction to Stage Makeup
- THEA131 - Theatre Appreciation
- CRJ126 - Introduction to Homeland Security
- GEOG138 - Geography of Michigan
- INTR181 - Principles of Design
- CHEM111 - Chem Skills Pre-Professional Programs
- SOC253 - Sociology of Deviance
- ART221 - Medieval Art
- PSY257 - Health Psychology
- ARA232 - Intermediate Arabic II
- SCI212 - Earth Science for Educators
- ANTH154 - Food, Culture, and Economy
- ARA231 - Intermediate Arabic I
- POLS200 - Introduction to Peace and Conflict
- MATH104 - Mathematics for Food Service Careers
- MATH141 - Introduction to Statistics
- WR240 - Myths & Symbols:Deciphering Sacred Trad
- CRJ140 - Identity Theft: Prevention and Awareness
- BIO139 - Environmental Science Laboratory
- PSCI135 - Sound & Light in Fine-Arts
- MATH275 - Discrete Mathematics
- ITAL132 - Elementary Italian II
- ANTH153 - Introduction to Archaeology
- WR233 - Eastern Religions
- WR232 - West Religion: Christian, Judaism, Islam
- ITAL131 - Elementary Italian I
- BIO138 - Environmental Science Lecture
- ENG236 - American Autobiography
- ENG232 - Introduction to the Short Story
- ART107 - Photoshop
- SCI210 - Intro to Science for Elementary Educator
- SCI213 - Learning By Inquiry: Life Science
- PSY251 - Abnormal Psychology
- ENGR130 - Introduction to Engineering
- BIO150 - Biology: Organisms, Genes, and Ecology
- BIO152 - Cell and Molecular Biology
- ART224 - Art of Islam
- HON251 - Great Works
- SOC251 - Ethnic & Racial Diversity in Society
- HON151 - Honor Colloquium-History Culture Detroit
- CHEM244 - Microscale Organic Chemistry Lab II
- PSY253 - Lifespan Development
- MUS130 - Music Appreciation
- MATH101 - Mathematics for Health Careers
- HUM101 - Introduction to the Humanities
- CRJ285 - Topics in Criminal Justice/Law Enfor
- ATMS131 - Weather and Climate
- BIO135 - Microbiology for Allied Health Sciences
- ENG246 - Introduction to Children's Literature
- ARA132 - Elementary Arabic II
- TCM241 - Media Writing
- TCM132 - Film History and Criticism
- TCM131 - Introduction to Telecommunication
- MUS133 - Exploring Popular Music
- ENG135 - Business & Technical Writing & Research

- ENG248 - African American Literature
- ARA131 - Elementary Arabic I
- TAFD130 - Industrial Applications Physical Science
- ASTR133 - Introductory Astronomy Laboratory
- ART135 - Art Appreciation
- TAMA120 - Industrial Applications Algebraic Princi
- MUS238 - Music Theory 3
- MUS233 - History of Western Music 2
- MUS232 - History of Western Music 1
- MUS138 - Music Theory 1
- ENG234 - Topics in Literature
- ENG233 - Introduction to the Novel
- WR130 - Introduction to Study of World Religions
- CHEM243 - Microscale Organic Chemistry Lab I
- CHEM242 - Organic Chemistry II
- WR131 - Religious Traditions in the World
- SPN232 - Intermediate Spanish II
- SPN231 - Intermediate Spanish I
- SPN132 - Elementary Spanish II
- SPN131 - Elementary Spanish I
- SPC145 - Interpersonal Communication
- SPC131 - Intro to Public Speaking
- SOC254 - Social Psychology
- SOC152 - Women, Men, and Society
- SOC151 - Contemporary Social Problems
- SOC132 - Marriage & the Family
- SOC131 - Introduction to Sociology
- PSY254 - Social Psychology
- PSY152 - Child Psychology
- PSY131 - Introductory Psychology
- PSCI131 - Introduction to Physical Science
- POLS155 - State & Local Government
- POLS152 - International Relations
- POLS135 - American Legal System & Process
- POLS131 - Intro to American Gov't & Politi Science
- PHYS232 - Engineering Physics II
- PHYS231 - Engineering Physics I
- PHYS133 - Principles of Physics
- PHYS132 - General Physics II
- PHYS131 - General Physics I
- PHIL139 - Ethics
- PHIL137 - Topics in Philosophy
- PHIL135 - History of Modern Philosophy
- PHIL133 - History of Philosophy to 18th Century
- PHIL131 - Introduction to Logic
- MUS142 - Aural Music Skills 2
- MUS141 - Aural Music Skills 1
- MUS139 - Music Theory 2
- MUS134 - Music Fundamentals
- MUS132 - Music Literature
- MATH283 - Linear Algebra
- MATH280 - Calculus III
- MATH183 - Calculus II
- MATH180 - Calculus I
- MATH175 - Precalculus
- MATH115 - College Algebra
- MATH112 - Trigonometry
- MATH110 - Intermediate Algebra
- MATH103 - Technical Mathematics
- MATH100 - Basic Technical Mathematics
- JOUR131 - News Writing
- HIST152 - Modern American History
- HIST151 - Early American History
- HIST113 - Modern World History
- HIST112 - Medieval-Early Modern World History
- HIST111 - Ancient World History
- GER232 - Second-Year German IV
- GER231 - Second-Year German III
- GER132 - Elementary German II
- GER131 - Elementary German I
- GEOL131 - Physical Geology
- GEOG132 - World Regional Geography
- GEOG131 - Environmental Geography
- FRE232 - Second-Year French IV
- FRE231 - Second-Year French III
- FRE132 - Elementary French II
- FRE131 - Elementary French I
- ENGR232 - Statics
- ENGR201 - Science of Materials
- ENG245 - The Bible as Literature
- ENG243 - Women's Literature
- ENG241 - Shakespeare
- ENG237 - American Literature Since 1900
- ENG235 - American Literature Before 1900
- ENG231 - Intro to Literature: Poetry and Drama
- ENG139 - Creative Writing
- ENG132 - College Writing and Research
- ENG131 - Introduction to College Writing
- CRJ252 - Criminal Procedure
- CRJ251 - Criminal Law
- CRJ138 - Probation and Parole
- CRJ136 - Introduction to Corrections
- CRJ135 - Juvenile Justice
- CRJ134 - Criminal Investigation
- CRJ132 - Police Admin - Staff and Line Operations
- CRJ131 - Intro Law Enforcement & Criminal Justice
- CHEM241 - Organic Chemistry I
- CHEM142 - Principles Gen & Inorganic Chemistry II
- CHEM141 - Principles Gen & Inorganic Chemistry I
- CHEM132 - Principles Organic&Biological Chemistry
- CHEM131 - Principles of Chemistry
- BMA110 - Business Math
- BIO251 - Microbiology
- BIO234 - Anatomy and Physiology II
- BIO233 - Anatomy and Physiology I
- BIO143 - Zoology
- BIO134 - Essentials of Anatomy and Physiology
- BIO131 - Introduction to Biology
- BIO130 - Evolution and Behavior
- BEC152 - Principles of Microeconomics
- BEC151 - Principles of Macroeconomics
- ASTR131 - Descriptive Astronomy
- ART130 - History of Graphic Design
- ART123 - History of Modern Art
- ART122 - Art History Survey II
- ART121 - Art History I - Pre-Historic to Medieval
- ANTH152 - Middle Eastern Peoples and Cultures
- ANTH151 - Cultures of North America
- ANTH131 - Introduction to Anthropology

CAT5 - Gen Ed Applied - 2025

Complete ANY:

- ARA130 - Pre-Elementary Arabic
- ARA131 - Elementary Arabic I
- ARA132 - Elementary Arabic II
- ARA231 - Intermediate Arabic I
- ARA232 - Intermediate Arabic II
- ART107 - Photoshop
- ART121 - Art History I - Pre-Historic to Medieval
- ART122 - Art History Survey II
- ART123 - History of Modern Art
- ART130 - History of Graphic Design
- ART135 - Art Appreciation
- ART221 - Medieval Art
- ART224 - Art of Islam
- ART225 - Asian Art: Art of India & SE Asia
- ART226 - African and Afro American Art
- ART227 - History of Arab Art & Architecture
- ART229 - Survey of Contemporary Art
- ASL131 - Elementary American Sign Language I
- ASL132 - Elementary American Sign Language II
- ASL135 - Fingerspelling and Numbering
- ASL140 - Fingerspelling and Numbering
- ASL231 - Intermediate American Sign Language I
- ASL232 - Intermediate American Sign Language II
- EDU250 - Humanities & Performing Arts Educators
- ENG139 - Creative Writing
- ENG231 - Intro to Literature: Poetry and Drama
- ENG232 - Introduction to the Short Story
- ENG233 - Introduction to the Novel
- ENG234 - Topics in Literature
- ENG235 - American Literature Before 1900
- ENG236 - American Autobiography
- ENG237 - American Literature Since 1900
- ENG241 - Shakespeare
- ENG243 - Women's Literature
- ENG245 - The Bible as Literature
- ENG246 - Introduction to Children's Literature
- ENG248 - African American Literature
- FRE131 - Elementary French I
- FRE132 - Elementary French II
- FRE231 - Second-Year French III
- FRE232 - Second-Year French IV
- GER131 - Elementary German I
- GER132 - Elementary German II
- GER231 - Second-Year German III
- GER232 - Second-Year German IV
- HIST111 - Ancient World History
- HIST112 - Medieval-Early Modern World History
- HIST113 - Modern World History
- HIST151 - Early American History
- HIST152 - Modern American History
- HIST254 - History of Michigan
- HIST258 - The Revolutionary War Era
- HIST261 - The Modern Middle East
- HIST270 - The American Civil War
- HIST285 - The U S and the Second World War
- HIST261 - The Modern Middle East
- HIST270 - The American Civil War
- HIST285 - The U S and the Second World War
- HIST286 - The U S and the Vietnam War
- HON151 - Honor Colloquium-History Culture Detroit
- HON251 - Great Works
- HUM101 - Introduction to the Humanities
- HUM105 - World Civilization I
- HUM204 - Introductio to American Cultural Studies
- HUM251H - Great Works
- BLDI120 - Principles of Design
- BLDI130 - Design & User Needs
- BLDI140 - Interior Design Materials & Components
- BLDI150 - Lighting & Environmental Systems Interio
- INTR181 - Principles of Design
- ITAL131 - Elementary Italian I
- ITAL132 - Elementary Italian II
- JOUR131 - News Writing
- MCA131 - Intoduction to Media Communication
- MCA132 - Film History and Criticism
- MCA241 - Media Writing
- TCM131 - Introduction to Telecommunication
- TCM132 - Film History and Criticism
- TCM241 - Media Writing
- MUS130 - Music Appreciation
- MUS132 - Music Literature
- MUS133 - Exploring Popular Music
- MUS134 - Music Fundamentals
- MUS138 - Music Theory 1
- MUS139 - Music Theory 2
- MUS141 - Aural Music Skills 1
- MUS142 - Aural Music Skills 2
- MUS154 - Arab Music Appreciation
- MUS232 - History of Western Music 1
- MUS233 - History of Western Music 2
- MUS238 - Music Theory 3
- PHIL130 - Introduction to Philosophy
- PHIL131 - Introduction to Logic
- PHIL133 - History of Philosophy to 18th Century
- PHIL135 - History of Modern Philosophy

- PHIL137 - Topics in Philosophy
- PHIL138 - Moral Issues in Biotechnology
- PHIL139 - Ethics
- PHIL201 - Eastern Philosophy
- SPC131 - Intro to Public Speaking
- SPN131 - Elementary Spanish I
- SPN132 - Elementary Spanish II
- SPN141 - Elementary Spanish Conversation
- SPN231 - Intermediate Spanish I
- SPN232 - Intermediate Spanish II
- SPN290 - StudyAbroad Spanish Lang&Hispan Culture
- THEA131 - Theatre Appreciation
- THEA135 - Introduction to Stage Makeup
- THEA138 - Stage Costuming
- THEA238 - Theatre History
- WR130 - Introduction to Study of World Religions
- WR131 - Religious Traditions in the World
- WR232 - West Religion: Christian, Judaism, Islam
- WR233 - Eastern Religions
- WR235 - Christianity - The First 1000 Years
- WR236 - African American Religious Exp/Expressi
- WR240 - Myths & Symbols:Deciphering Sacred Trad
- WR241 - Islam
- WR280 - Topics in Religious Studies

CAT2 - Gen Ed Transfer - 2020

Complete ANY:

- Complete ANY:
    - ENG131 - Introduction to College Writing
    - ENG131A - Introduction to College Writing (ALP)
    - ENG131H - Honors Introduction to College Writing
    - ENG132 - College Writing and Research
    - ENG132 - College Writing and Research
    - ENG135 - Business & Technical Writing & Research
- Complete ANY:
    - SPC131 - Intro to Public Speaking
    - SPC145 - Interpersonal Communication